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Ozone Climatology
Series, Volume 1
Atlas of Total Ozone:
April 1970-December 1976

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National Aeronautics and Space Administration

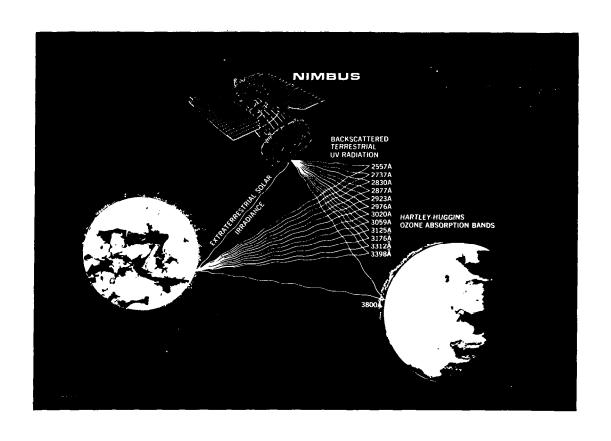
Scientific and Technical Information Branch

All measurement values are expressed in the International Systems of Units (SI) in accordance with NASA Policy Directive 2220.4, paragraph 4.

PREFACE

The total column amount of atmospheric ozone averaged over the globe is about 0.3 atm-cm, which is less than 10⁶ of the atmosphere. Fifteen years ago, the major interest in total ozone was as a meteorological parameter. Today its spatial and temporal variability on climatological time scales (greater than one month) is a subject of renewed interest because of possible changes related to man's activities, its possible importance as a factor in producing climate change and its filtering properties of biologically active solar ultraviolet radiation.

This atlas covers the entire period of regular observations with the Back-scattered Ultraviolet (BUV) instrument on Nimbus-4 from April 1970 through December 1976. This volume is the first of a series of ozone climatological atlases based upon observations with the BUV technique which began on Nimbus-4, and was continued on the Nimbus-7 satellite by the Solar Back-scattered Ultraviolet and the Total Ozone Mapping Spectrometer (SBUV/TOMS) instruments.



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OZONE CLIMATOLOGY SERIES, VOLUME I

ATLAS OF THE GLOBAL DISTRIBUTION OF TOTAL OZONE FROM THE NIMBUS-4 BACKSCATTERED ULTRAVIOLET (BUV) INSTRUMENT APRIL 1970 – DECEMBER 1976

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INTRODUCTION

Atmospheric ozone has been known for years to be a highly variable quantity, both spatially and temporally, as demonstrated in the review by Dütsch (1971). Prior to the 1970s, little emphasis was placed on the determination of long-term trends in atmospheric ozone or the question of whether or not long-term changes are a manifestation of natural variability or are related to human activities. The need for early detection of trends in ozone resulting from human activities has been well documented in the scientific literature and will not be discussed here. In the coming years, it is quite likely that ozone will become increasingly important as an atmospheric parameter used to investigate the mechanisms of climate change.

This atlas presents monthly contours of total ozone and tables of gridded values (10° latitude by 20° longitude) derived from an objective analysis of Nimbus-4 BUV data. The page format is similar to that of the Atlas of the Global Distribution of Total Ozone, July 1957-June 1967 (London et al., 1976), which was derived from a subjective analysis of data obtained from the ground-based international ozone network.

While the formats of the two atlases are similar, the ozone distributions may not be, for a variety of reasons. Initial differences between the satellite and ground-based observations may arise from the ozone absorption coefficients, since the two observing systems use different wavelengths. Spatial differences are present because of calibration differences between the ground and satellite systems and also because of interstation calibration differences of the instruments of the ground-based network. Spatial inhomogeneity of the ground-based network may also be important, especially in the southern hemisphere.

Time-dependent biases between the ground and satellite systems are due principally to unknown changes in the satellite instrument system sensitivity with time. Initially the satellite-borne BUV instrument returns a value of total ozone, approximately 3 percent lower than the Dobson instrument. This bias increases at the approximate rate of 1/2 percent per year.

OBSERVATIONS WITH THE SOLAR BACKSCATTERED ULTRAVIOLET TECHNIQUE

The basic instrument described by Heath et al. (1970, 1973), which is shown in Figure 1, consists of a tandem Ebert-Fastie monochromator that samples the 12 wavelengths every 32 seconds between 255 and 340 nm. A separate photometer with the same instantaneous field of view (IFOV) as the monochromator measures the surface reflectivity at 380 nm in a wavelength region free from ozone absorption, coincident with measurements of each of the 12-ozone sounding wavelengths. One measurement cycle of 32 seconds will produce about 100 soundings per daylight portion of the orbit.

Scattering of ultraviolet solar radiation (250-340 nm) back into space by the terrestrial atmospheric system is governed principally by Rayleigh scattering from the molecular constituents in the atmosphere, absorption by ozone, and reflections from lower boundaries such as clouds, aerosols and the surface of the earth. In general, approximately 80 percent of the column ozone amount resides above the tropopause and 90 percent of the atmosphere below it. This approximate layering of ozone above most of the atmosphere leads to a much simpler algorithm for the inference of atmospheric ozone from space observations of the ultraviolet terrestrial albedo than if most of the ozone resided in the troposphere.

The weighting functions for a midlatitude ozone distribution of 0.350 atm-cm total column amount is shown in Figure 2 for solar zenith angles of 0° and 77°. The upper portion of the weighting functions results from Rayleigh scattering by air molecules in an exponential atmosphere. The lower portion of a weighting function is determined by ozone absorption of Rayleigh-scattered solar radiation.

The four longest wavelength contribution functions shown in Figure 2 peak in the troposphere and hence can be used to infer total ozone. The essential feature of the total ozone algorithm is the pairing of a strongly absorbing wavelength separated by about 20 nm from a weakly absorbing wavelength. This tends to minimize wavelength-dependent errors due to imperfect knowledge of the scattering properties of the atmosphere. From a knowledge of the solar zenith angle θ_0 , the surface reflectivity R and the pressure at the reflecting boundary, the ozone column amount is obtained from a precomputed table of albedoes based on a scheme originally proposed by Dave and Mateer (1967), used by Mateer et al. (1971) and subsequently updated by Klenk et al. (1982).

The calculation of the tables included multiple scattering of seven orders with an extrapolation for higher orders. The molecular anisotropy or depolarization is included in the total scattering cross sections via the tables of Penndorf (1957). Assumptions include Lambertian lower boundary reflecting surfaces, plane parallel atmosphere, but with a spherical atmosphere correction. Ozone absorption coefficients based on the measurements of Inn and Tanaka (1953) have been weighted over the slit function of the BUV and SBUV instruments by a technique described by Klenk (1980).

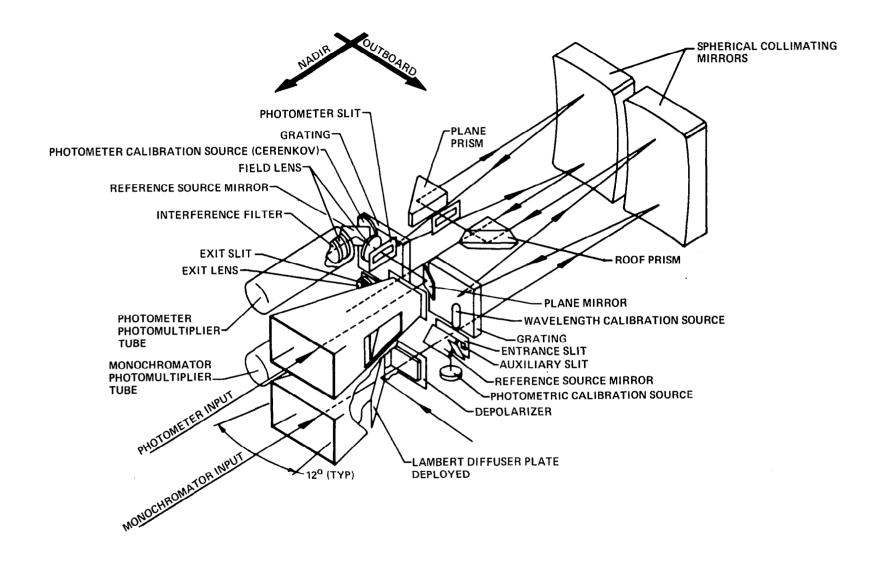


Figure 1. Optical diagram of the BUV photometer and monochromator.

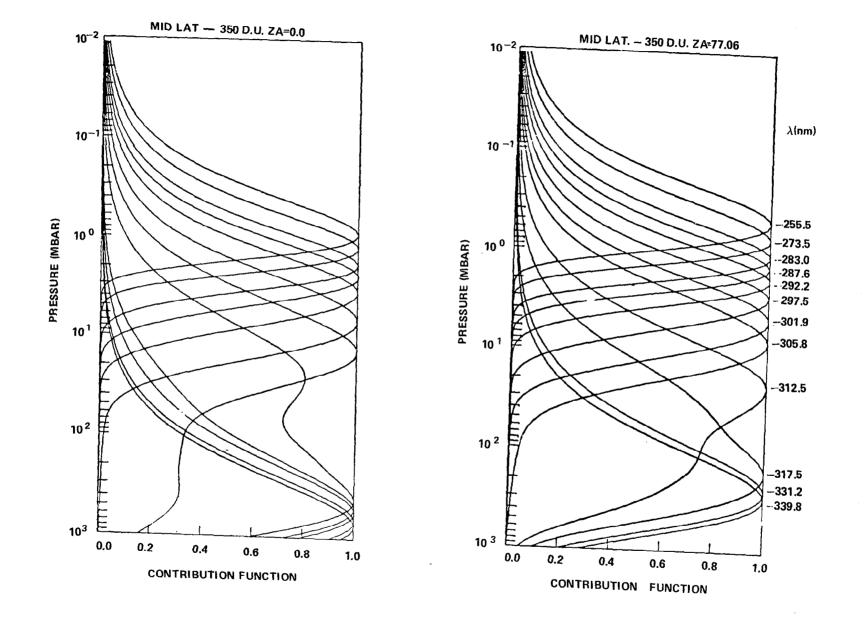


Figure 2. Ozone weighting functions for 0° and 77°.

The standard tables are constructed from 21 climatological profiles. Values for the albedo are derived for reflecting surface pressures of 1.0 and 0.4 atm for 10 values of the solar zenith angle from 0 to 85.7°.

The total backscattered radiance, I, at wavelength λ for units of incident solar flux has been given by Dave (1964):

$$I(\lambda, \theta_0, R, P_0, \Omega, S) = I_0(\lambda, \theta_0, P_0, \Omega, S) + \frac{T(\lambda, \theta_0, P_0, \Omega, S) R}{1 - RS^b(\lambda, P_0, S, \Omega)}$$

where θ_0 is the solar zenith angle at the point of observation, P_0 is the effective pressure of the lower boundary reflecting surface, T is the atmospheric transmittance, S^b is the atmosphere-to-surface backscatter function and R is the surface reflectivity. The symbol S signifies the dependence on ozone profile shape. At wavelengths outside the region of ozone absorption, the measured albedo can be used to infer the surface reflectivity. In the BUV instrumentation flown on Nimbus-4, a photometer was centered at 380 nm and on Nimbus-7 at 343 nm for this purpose.

A quantity called the N-value is used in the algorithm where $N = -100 \log_{10} I/F$, which for the wavelength pairs becomes

$$N_{pair} = N' - N'' = -\log_{10} \frac{I' F''}{F' I''}$$

where the primes denote respective members of the wavelength pair. The two wavelength N_{pair} is interpolated with respect to theoretical N-values to obtain total ozone. The two wavelength pairs that have been used by the BUV-type instruments on Nimbus-4 and -7 are the A-pair (312.5 and 331.2 nm) and the B-pair (317.5 and 339.8 nm).

A principal shortcoming in the algorithm is the inability to directly determine the pressure at the reflecting surface boundary. Instead, a pressure level is inferred from the effective reflectivity where it is assumed that clouds have high UV reflectances, and land and ocean surfaces have low UV reflectances. Problems arise when one is confronted with snow and ice cover at the surface. For latitudes poleward of 55° and R > 0.8, an effective pressure $P = 3/4 P_{terrain} + 1/4$ (0.4 atm) is used. For 0.6 < R < 0.8 and latitudes greater than 55°, the pressure is assumed to decrease linearly from 0.4 atm at R = 0.6 to that given for R > 0.8. Some of the principal sources of error in the algorithm used to infer total ozone are listed in Table 1 (from Bhartia et al., 1981).

TOTAL OZONE CLIMATOLOGY

The backscattered ultraviolet (BUV) ozone sensor (Figure 1) that was launched in April 1970 on board the Nimbus-4 satellite continued in operation through 1976, thus providing the longest satellite ozone data set to date. The total ozone data from this instrument have been processed and archived in the National Space Science Data Center (NSSDC), Goddard Space Flight Center. These data have now been analyzed to produce monthly average synoptic analyses and are available from the NSSDC on magnetic tape.

Table 1
BUV Total Ozone Error Sensitivity

Absorption cross	section ~5%		
Pseudorandom Erro	ors		
Atmospheric Condition	% of Total Data	Random Component (Rms)	Systematic Component
Low R (no cloud/snow)	~50%	~2%	_
Cloudy	~40%	2-4%	Small (1-2%) underestimation (low. lat. only)
Snow	~10%	2-3%	Small (1-2%) overestimation (mid. lat. only)
Near Terminator	~5%	3-6%	Temporal spatial biases likely (2-3%

The BUV measured about 500 points per hemisphere per day when operating continuously. The instrument was operated on a full-time basis from April through December 1970. For this period, daily analyses were constructed by adjusting a first-guess field (persistence from the previous day) on a 65 × 65 rectangular array representing a polar stereographic projection utilizing the system of Yanai (1964) and Cressman (1959). Monthly analyses were obtained by contouring the average of the daily analyses. After the initial period, spacecraft power limitations forced a reduction in the data rate, requiring a different analysis procedure.

For the period following December 1970, monthly analyses were derived by averaging the observed data directly within individual boxes of the same 65 X 65 grid system.

In the maps, blank areas represent missing data, and charts for the following months were not constructed due to lack of data:

December 1972	August 1975
December 1973	May 1976
January 1974	June 1976
June 1974	July 1976
July 1974	August 1976
June 1975	September 1976
July 1975	

000000# 1 TO 1

For general archival, all charts have been interpolated (or reprocessed) to a 5° latitude, 5° longitude global grid and are available from NSSDC.

LONG-TERM CHANGES IN TOTAL OZONE

An important application of the Nimbus-4 BUV data set is to use it in determining trends. Several authors, for example, Fleig et al. (1980) and Miller et al. (1982) have compared BUV with Dobson ground station observations. The year-by-year comparison is listed in Table 2. Here the AD direct sun observations only are included. The comparison shows a 10 du. decrease in BUV ozone relative to Dobson, from 1970 to 1975. After 1975, the BUV ozone increases somewhat relative to Dobson. Analyses of this trend using subsets of selected stations have been made to try to eliminate stations with unusual and erratic behavior or stations that have had known recalibrations during the BUV lifetime. The relative decrease from 1970-1975 is observed in each subset of stations and strongly suggests a BUV instrumental drift of between 5 and 10 Dobson units. The trend after 1975 is more uncertain because the number of samples is small and the coverage is less uniform.

Table 2
Total Ozone Averages and Standard Deviations for BUV, Dobson, and Difference
BUV Bias Obtained by Using 00/Dobson Codes Only

Year	Number	BU	V	Dob	son	Diffe	rence
	i	Ave	<u>Std</u>	Ave	Std	Ave	Std
1970	1275	316	52	327	54	-11	17
1971	1305	310	51	321	52	-11	18
1972	1003	321	51	335	52	-14	18
1973	425	317	50	336	52	-20	17
1974	417	300	49	321	47	-21	15
1975	363	297	49	319	52	-22	19
1976	304	298	47	316	46	-18	14
1977	103	345	59	358	57	-13	17

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APPENDIX A

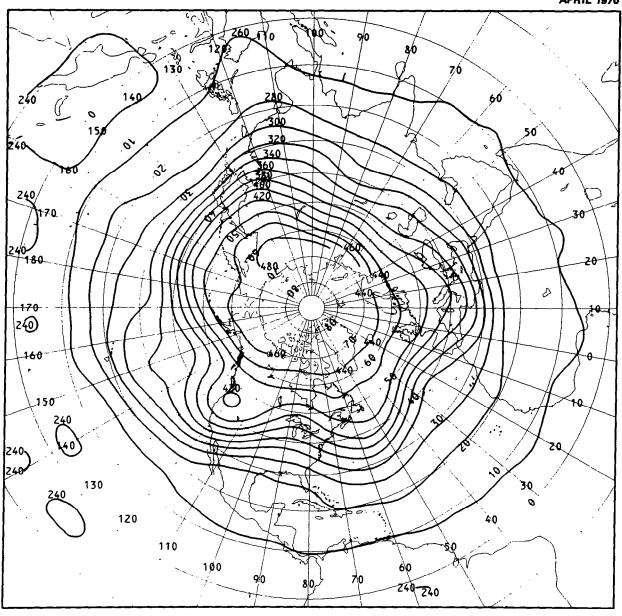
MAPS AND CHARTS

OF

MEAN MONTHLY TOTAL OZONE

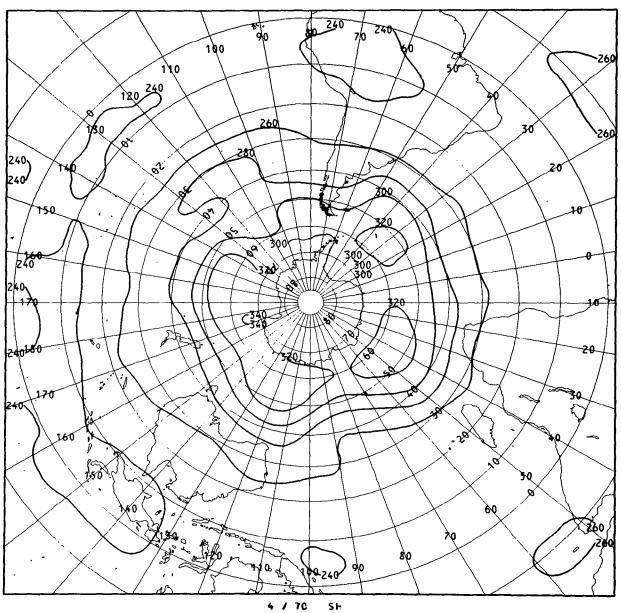
Measurements in Dobson Units

TOTAL OZONE APRIL 1970



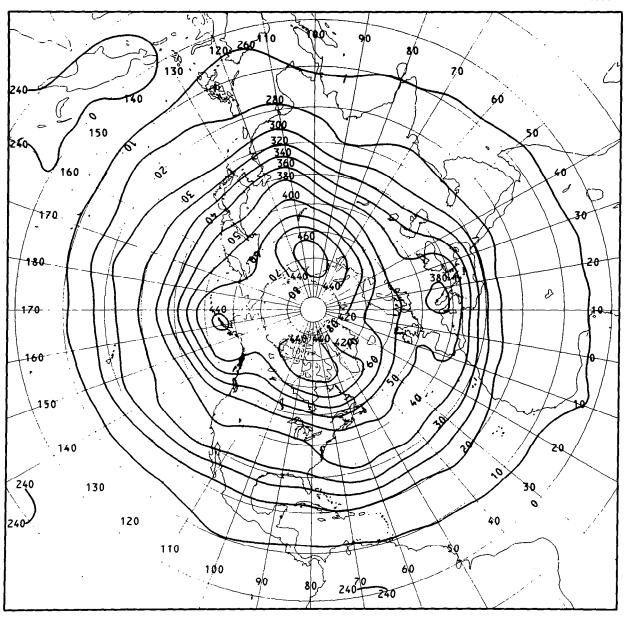
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30	316	311	297	287	286	308	324	300	312	313	332	335	33 3	286	252	325	304	304	309
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TOTAL OZONE APRIL 1970



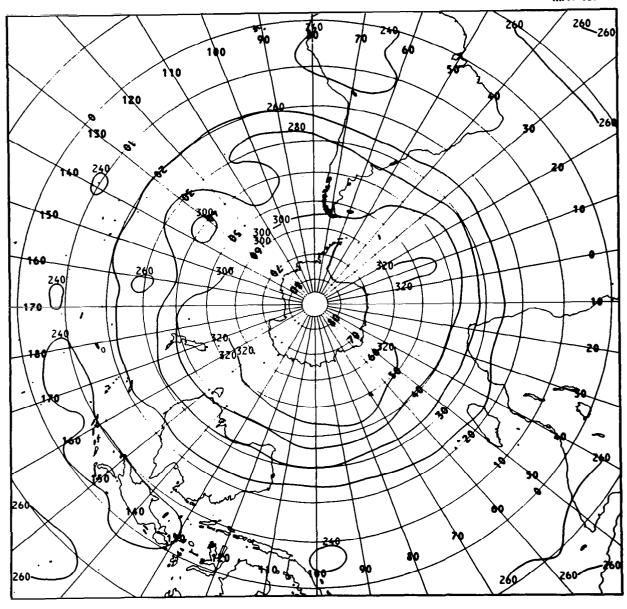
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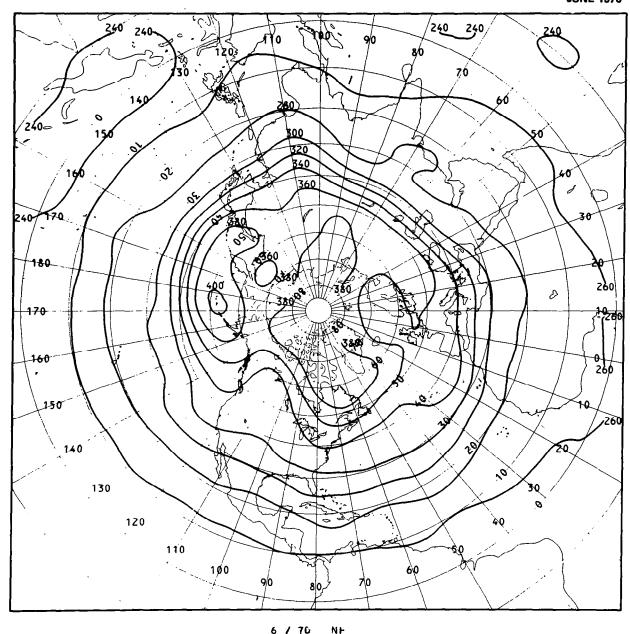
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TOTAL OZONE MAY 1970



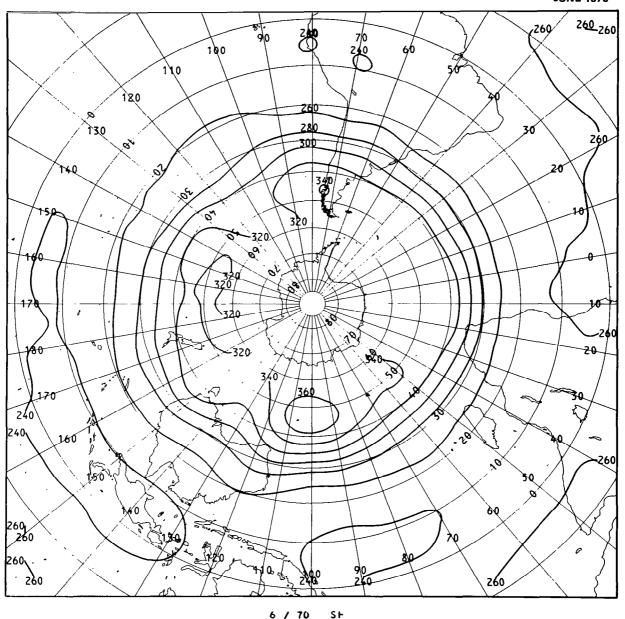
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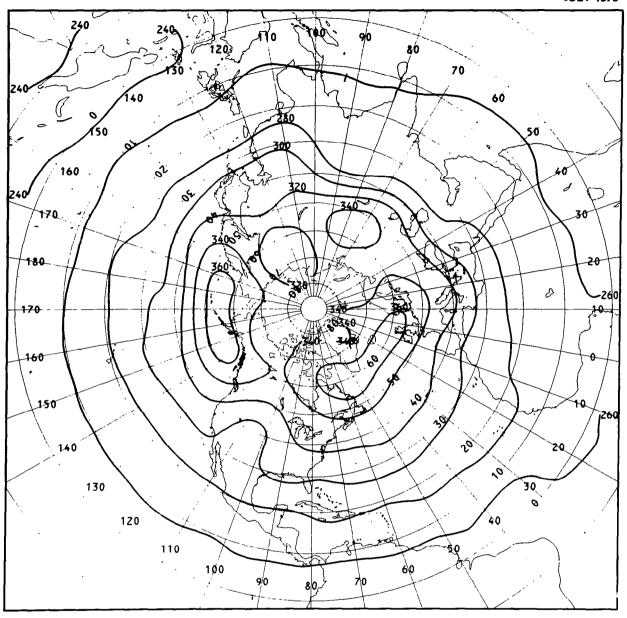
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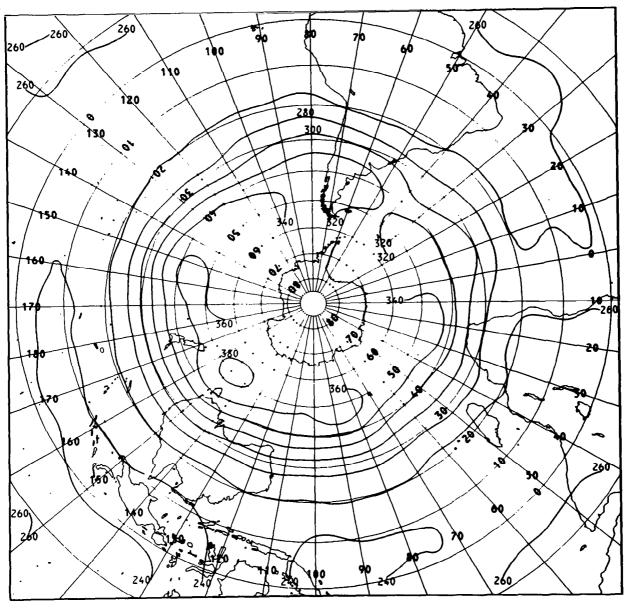
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-76	C	Ú	C	0	O	ø	υ	G	0	0	Ü	0	O	e	0	c	Ç	L	5
-80	e	ŋ	0	0	G	0	v	0	0	0	0	0	0	3	C	G	9	Ü	0

TOTAL OZONE JULY 1970



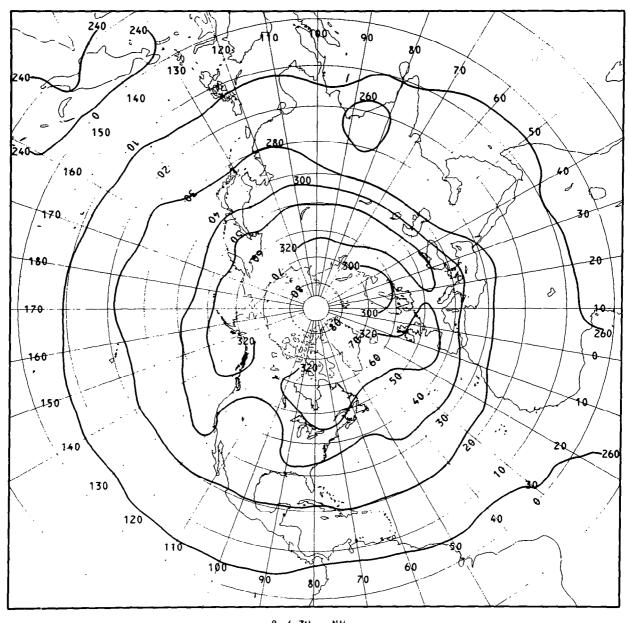
								7 /	76	NH									
LATITUDE					EAS	Γ				L) N (3 I I	r u i	DΕ					ZONAL
	O	20	40	60	38	100	120	14C	160	18G	20L	223	24)	260	2 E C	300	32¢	340	MEAN
80	34C	338	335	333	336	323	3 <i>2</i> Ú	322	327	331	331	332	334	338	340	339	3 37	339	332
70	347	338	331	330	336	318	305	310	330	341	336	329	3.30	343	354	355	344	346	334
60	364	351	337	339	347	328	314	318	345	359	356	352	343	338	357	370	365	366	347
50	344	342	328	337	339	327	321	325	350	359	360	358	332	319	327	349	344	337	339
40	314	320	296	303	288	300	313	316	324	309	314	323	310	299	325	326	323	319	312
30	291	290	281	277	267	279	293	290	287	297	300	29 7	298	298	302	30.9	36 7	298	292
20	278	275	272	273	263	269	270	270	271	279	2 78	277	2 7 6	280	282	283	283	282	275
10	272	266	262	268	259	259	2 58	256	258	257	261	261	262	262	267	269	269	271	263
٥	261	258	252	249	244	245	250	241	242	243	245	245	248	251	247	248	253	259	248

TOTAL OZONE JULY 1970



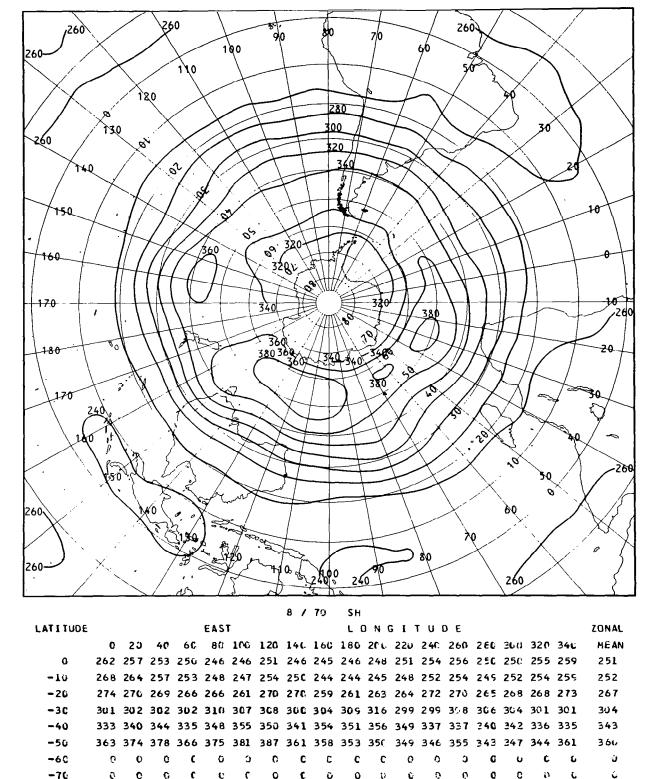
								7 /	70	SH									
LATITUDE					EAS	T				LC) N (; ; 1	ប្រ	ΡE					ZONAL
	o	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	34¢	MEAN
0		_								243									248
-10			_							239									247
-20										257									260
-36										302									294
-40										356									334
-50		_								363									348
-60	0		G	Ω	_		0	0	0	C		O	0	J	0		()	0	0
-70	e	_	0	0	L	٥	6	o	٥	C	G	٥	c	o	G	O	0	G	a
-80	٥	٥	9	0	-	_	o	0	C	0	0	O	0	O	0	0	6	o	0

TOTAL OZONE AUGUST 1970



								8 /	70	NH										
LATITUDE					EAS	ī				Į I	3 N G	3 I	τυ	DE					ZONAL	
	C	20	40	60	80	160	120	146	160	180	266	220	240	260	280	300	32 0	340	MEAN	
80	299	293	288	286	288	291	292	295	299	302	303	3¢ 2	303	30,5	365	311	309	3 <i>u</i> 5	298	
70	302	289	288	296	304	3 C 4	310	319	327	328	324	312	304	312	324	325	320	316	311	
60	312	30 2	365	319	327	324	329	324	326	333	334	326	315	323	333	328	327	326	322	
50	326	320	325	320	321	318	317	316	313	312	322	324	308	30 5	328	318	313	324	318	
4 G	306	308	292	280	279	288	290	293	291	294	300	30 7	297	29 2	311	36 I	304	312	257	
30	282	285	275	271	260	269	280	277	287	294	294	291	300	292	253	292	295	292	284	
20	275	273	270	268	260	263	270	265	271	276	273	279	280	279	279	279	280	278	273	
10	270	263	262	267	259	256	2 57	255	257	260	264	267	267	269	267	268	268	268	263	
0	262	25.7	253	250	246	246	251	246	245	246	248	251	254	256	250	250	255	259	251	

TOTAL OZONE AUGUST 1970



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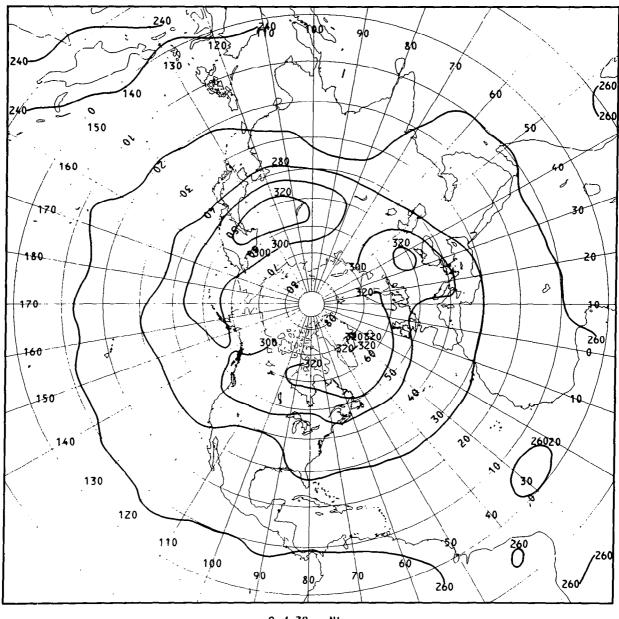
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-76

-86

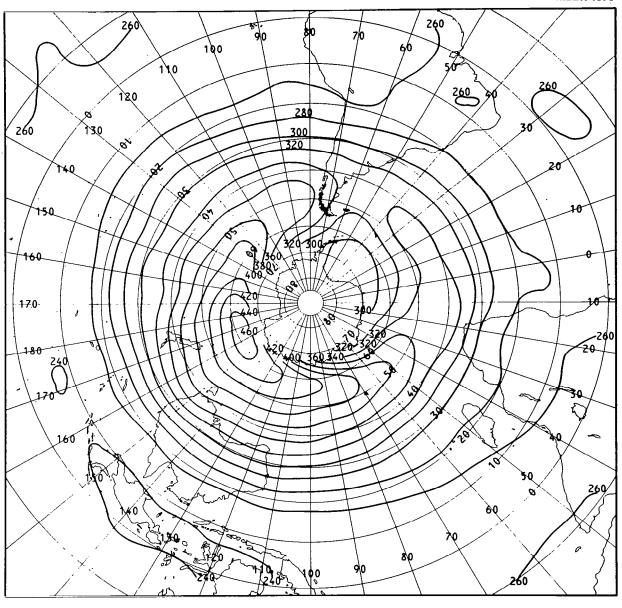
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TOTAL OZONE SEPTEMBER 1970



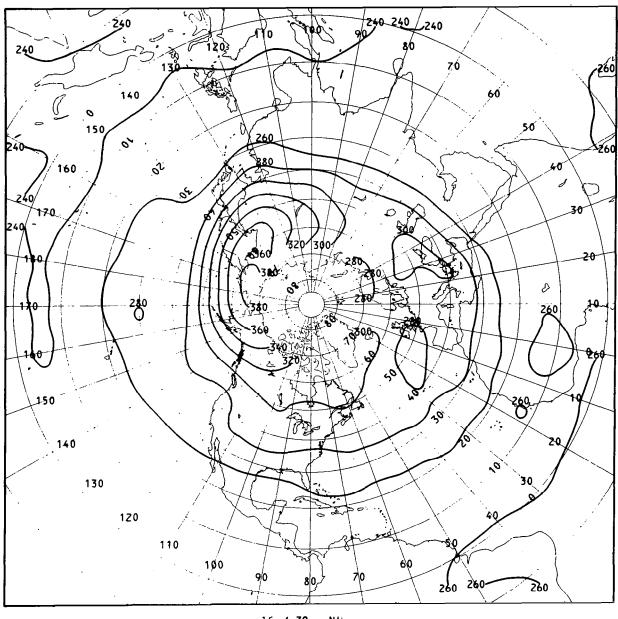
								9 /	70	Νŀ									
LATI TUDE					EAS	T				L) N (; i :	T U I	DΕ					ZONAL
	Ú	20	40	60	80	105	120	146	160	180	20 C	22 G	244	260	2 E C	367	320	340	MEAN
80	Ų	e	9	C	9	9	G	Ø	0	G	Ú	٤	0	3	Ĺ	^	C	C.	O
7G	316	316	3 ù 5	292	286	287	286	287	287	287	294	298	299	3ć 7	313	316	3 . 1	312	202
60	319	316	311	299	297	314	317	313	305	254	294	298	303	319	324	333	328	329	311
50	294	310	321	294	298	314	3 26	322	315	307	303	296	306	310	302	316	317	366	308
4C	293	30.2	289	276	27 3	280	290	283	285	288	290	283	290	281	285	288	292	296	287
30	28C	279	268	265	258	257	266	268	275	274	279	276	276	272	283	282	284	285	273
20	268	265	262	264	254	255	257	260	261	264	265	264	271	265	269	271	271	276	264
10	266	260	257	266	255	253	251	250	255	254	256	259	262	26:)	261	266	267	265	258
٥	261	258	257	251	248	247	245	246	248	246	248	252	254	254	254	254	260	261	252

TOTAL OZONE SEPTEMBER 1970



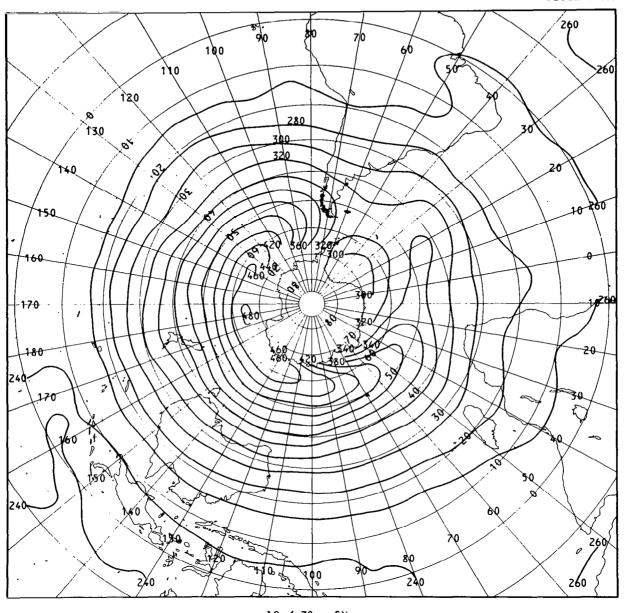
								9 /	76	SH									
LATITUDE					EAST	Γ				LO) N (3 1 1	rui) E					ZONAL
	Ü	20	40	60	80	160	120	140	160	180	200	226	240	260	2 8 0	36.)	32 L	340	MEAN
0	261	258	257	251	248	247	245	246	248	246	248	252	254	254	254	254	260	261	252
-10	272	269	265	256	25¢	250	2 50	252	248	246	247	250	254	252	251	253	259	267	254
-2C	282	279	279	277	269	270	267	274	269	270	271	272	277	267	271	266	276	281	272
-36	312	307	303	304	304	314	318	313	319	320	325	315	313	314	306	360	3ù 6	308	310
-4C	345	348	340	347	352	365	364	354	369	362	355	357	344	353	351	333	336	334	350
-50	336	348	367	382	395	412	4ù9	399	405	463	357	391	378	375	365	332	332	336	375
-60	311	32 7	349	364	388	417	434	434	439	446	436	411	389	367	342	214	30-2	305	376
-70	n	0	o	0	0	0	0	0	0	U	Ġ	C	J	Ð	C	Ü	Ü	Ci	Ü
-80	G	0	õ	ō	ţ,	0	Ü	C	0	÷	ΰ	Ü	G	_	G	၁	G	Ĺ	Ç

TOTAL OZONE OCTOBER 1970



								16 /	70	NH									
LATITUDE					EAS	T ^{ree}				L) N (SI	T U 1	DE					ZONAL
	r	27	46	60	80	160	120	140	160	186	263	220	240	260	260	300	32 C	340	MEAN
80	Ü	0	Ü	Ú	0	0	3	0	Ĺ	C	•	C	U	9	ü	Ü	v	Ü	U
70	285	272	268	276	291	308	326	352	376	383	374	357	337	321	316	30.9	299	296	319
60	289	293	291	288	303	325	3 47	371	378	369	358	3 38	324	315	315	313	304	299	323
50	281	293	303	294	294	313	337	348	331	309	306	299	294	3 C I	255	361	293	276	303
40	288	300	290	278	272	281	296	289	271	265	273	279	277	292	286	288	284	281	282
30	274	27 1	257	254	253	249	263	256	263	268	277	272	272	268	268	272	275	278	266
20	257	254	252	255	251	243	244	252	257	259	255	252	249	252	256	256	259	259	253
10	262	25 5	248	253	246	240	241	245	241	246	243	246	247	25C	247	253	25 4	259	248
a	260	255	251	250	242	241	241	240	241	243	243	244	247	247	248	250	259	258	247

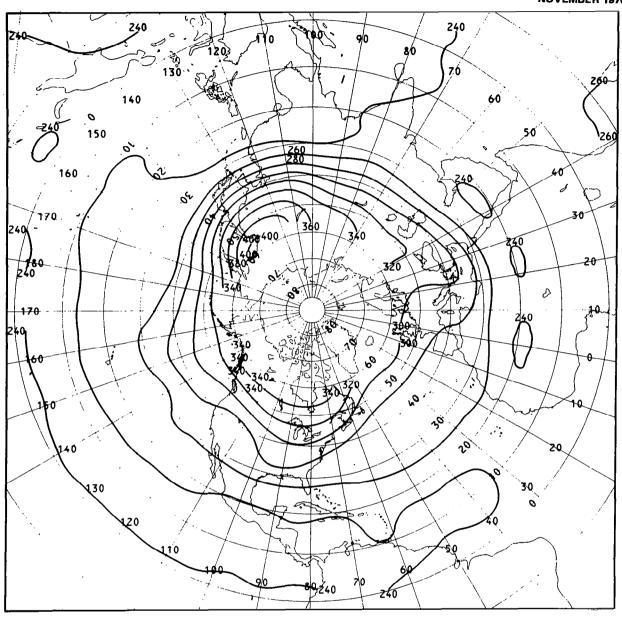
TOTAL OZONE OCTOBER 1970



]	LC /	70	SH										
LAT I TUDE					EAS	r				L	3 N C	3 I I	r u i	DΕ					ZONAL	
	ن	20	40	60	6.8	1GU	120	140	160	180	200	220	240	260	2 E Ç	300	32 C	340	MEAN	
O	260	255	251	250	242	241	241	24i	241	243	243	244	247	247	248	250	259	258	247	
-10	271	266	267	257	250	251	250	249	246	245	246	248	251	251	251	252	259	267	254	
-20	281	279	280	278	269	272	271	277	271	272	271	269	277	270	269	266	277	277	273	
-30	297	29 7	303	306	299	304	309	313	307	314	312	30 3	308	307	295	287	300	303	303	
-40	322	32 4	342	340	342	3 52	3 52	356	349	354	357	348	347	341	333	316	318	334	340	
-50	340	35 4	376	391	397	410	414	416	40 0	401	405	398	402	387	367	337	333	335	381	
-60	323	343	363	389	418	443	466	466	461	466	465	453	442	411	371	333	313	315	492	
-70	0	O	0	ũ	Ç.	0	0	0	0	0	C	O	Ü	3	C	0	Ü	e	0	
-80	0	٥	0	Ú	¢	ซ	٥	С	C	Ü	O	e	э	э	C	U	Ü	C:	0	

TOTAL OZONE NOVEMBER 1970

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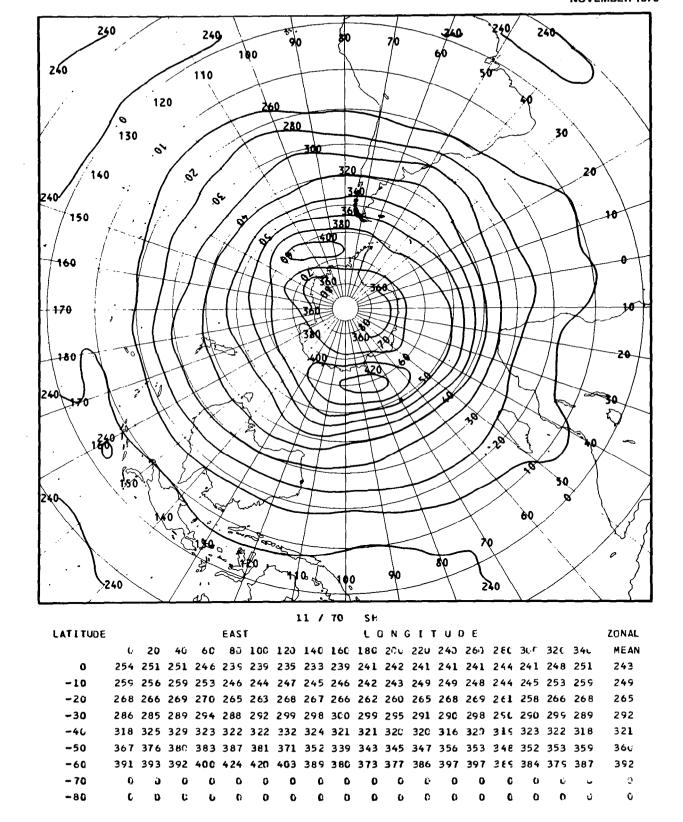


LATITUDE LONGITUDE ZONAL 80 100 120 140 160 180 200 220 240 260 280 360 320 340 MEAN 0 80 76 329 323 321 328 342 359 381 397 392 379 375 373 372 368 353 336 336 357 309 311 320 336 350 361 390 410 386 357 349 355 357 359 359 341 319 317 349 60 50 321 4C 287 257 3 Q 26 239 240 241 244 242 232 234 237 246 252 251 249 246 240 243 248 247 248 243 16 249 245 246 234 234 233 238 239 235 237 234 234 239 238 239 237 243 239

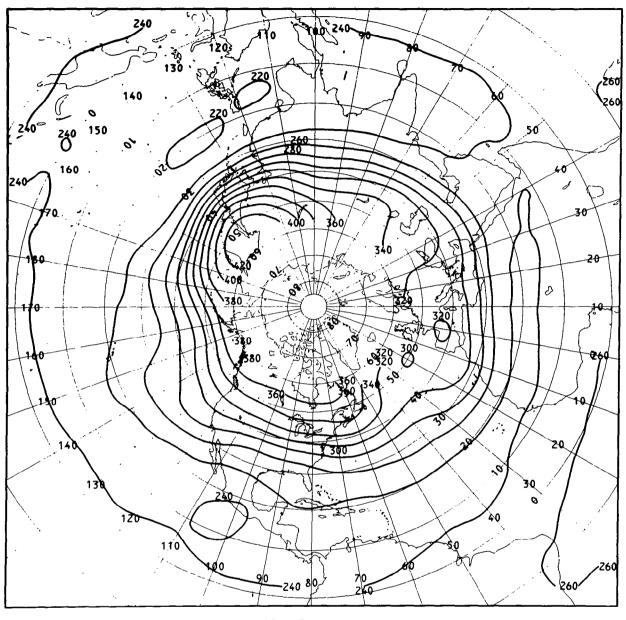
254 251 251 246 235 239 235 233 239 241 242 241 241 241 244 241 248 251

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TOTAL OZONE
NOVEMBER 1970

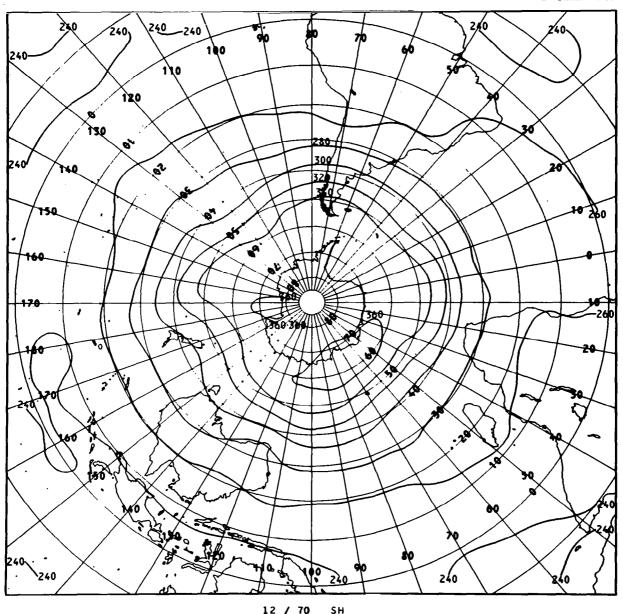


TOTAL OZONE DECEMBER 1970



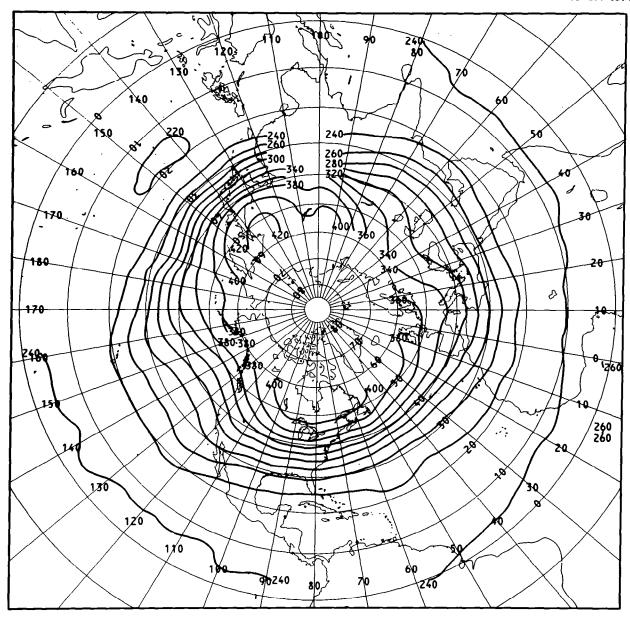
12 / 70 NH																			
LAT I TUDE					EAS	T				L) N (G I	TU	DE					ZONAL
	0	20	40	60	80	160	120	146	160	186	200	220	240	260	280	300	32 ს	340	MEAN
80	e	0	o	C	G	G	0	O	0	0	J	O	o.	o	Ç	.)	Ü	c	U
70	C	0	0	0	o	0	0	0	0	0	C	0	Ü	3	O	Ũ	0	0	J
60	321	335	340	353	360	382	419	432	421	397	391	397	386	37 9	3 € 5	372	346	328	374
50	31 L	310	330	341	349	361	400	432	409	363	328	341	346	345	350	350	315	30C	348
40	319	30 7	322	328	319	3 10	343	355	318	297	277	294	306	294	3 C 4	315	299	3ů 7	312
30	279	269	280	267	255	251	251	246	241	255	252	276	266	246	253	265	268	289	261
20	238	238	242	239	231	226	222	219	225	233	238	241	236	239	235	239	240	242	234
10	248	245	241	237	233	228	224	228	232	235	234	235	236	240	232	233	234	243	235
U	261	257	252	247	242	241	237	239	242	242	244	245	244	241	242	246	252	257	245

TOTAL OZONE DECEMBER 1970



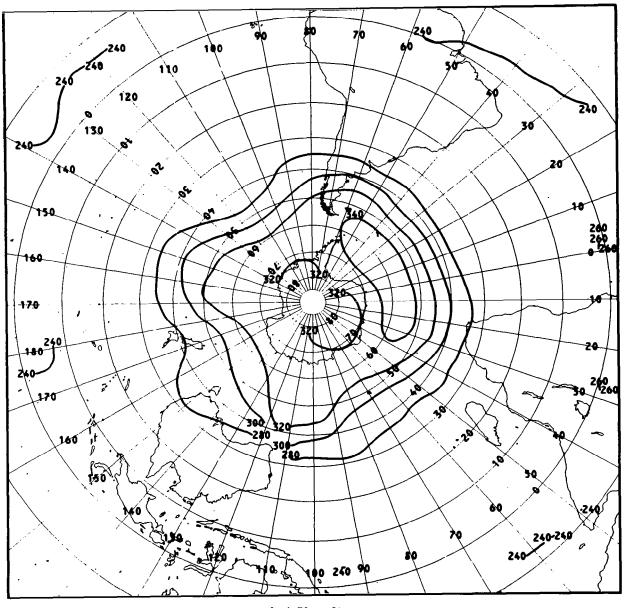
								12 /	10	311									
LAT I TUDE					EAST	T				L () N (rui	D E					ZONAL
	O	20	40	60	80	100	120	140	160	186	200	220	240	260	280	300	320	346	MEAN
0	261	257	252	247	242	241	237	239	242	242	244	245	244	241	242	246	252	257	245
-10	265	261	259	255	249	248	250	248	248	242	244	252	250	250	247	250	25 7	262	252
-20	267	265	265	266	260	262	260	262	260	262	260	263	263	261	260	255	264	26£	261
-3¢	281	281	278	278	280	281	272	282	28ú	2 83	284	282	280	273	276	274	278	286	279
-40	316	313	301	296	304	312	301	301	298	302	307	30 3	296	294	306	305	301	306	303
-50	351	348	333	330	341	345	338	327	319	324	333	328	321	327	339	345	333	337	334
-60	354	357	361	368	373	362	353	349	346	348	351	351	348	346	349	354	354	354	354
- 7ŭ	350	354	358	362	363	355	349	349	355	362	358	353	353	353	352	349	351	352	354
-80	G	2	Ù	Ü	Ú	G	r	e	0	0	c	0	ō	O	C	ن	Ü	0	0

TOTAL OZONE JANUARY 1971

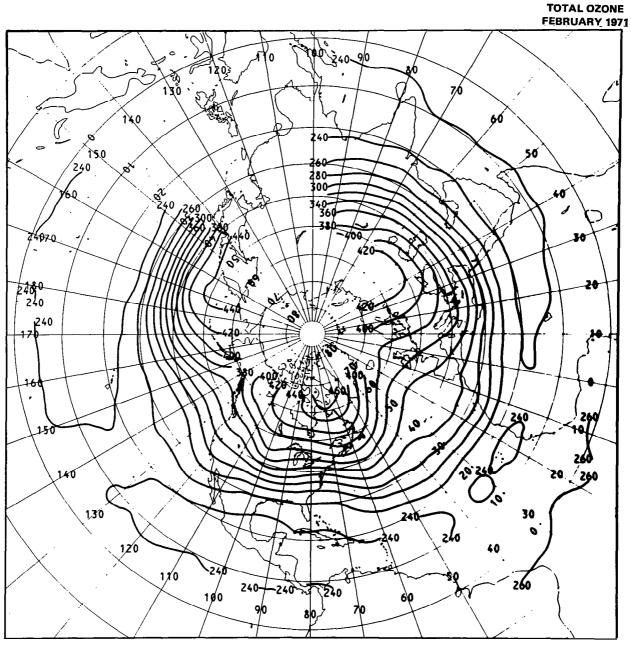


								1 /	71	NH									
LATITUDE					EAS	T				L	אכ	3 1	T U I	DΕ					ZONAL
	O	20	40	60	86	100	120	14C	160	180	260	220	240	260	2 E G	300	320	340	MEAN
80	0	o	O	0	Ú	0	0	G	Э	C	r	υ	ŋ	C	C	O	0	ð	ð
70	0	0	O	0	G	0	0	o	O	0	0	Ú	0	0	Ĺ	Ü	ن	, O	Û
6 G	392	376	346	354	Э	0	422	399	399	ū	399	0	O	402	437	407	374	396	392
50	345	336	317	345	358	386	431	425	397	372	369	352	357	413	419	425	363	372	377
40	321	324	311	326	311	0	353	373	330	334	328	293	314	329	371	316	330	316	331
30	259	263	267	274	262	0	266	254	250	263	294	268	274	264	257	251	260	263	263
20	235	233	232	232	227	0	223	217	217	252	238	237	242	238	228	235	236	226	230
10	241	249	237	233	229	240	228	230	230	228	234	235	232	239	233	235	234	233	233
0	257	254	252	247	239	236	G	237	234	235	243	244	245	243	246	239	248	253	244

TOTAL OZONE JANUARY 1971

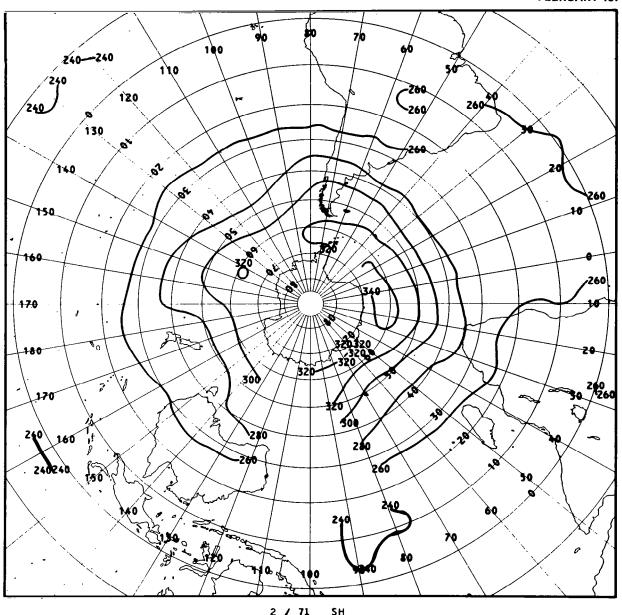


								1 /	71	SH									
LAT I TUDE					EAS	ī				L) N (3 I I	ប្រវ	DE					ZONAL
	C	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	MEAN
0	257	254	252	247	239	236	Ū	237	234	235	243	244	245	243	246	239	248	253	244
-10	26 5	248	251	243	236	242	Ü	238	238	242	240	253	253	251	246	25 <i>i</i>	259	262	247
-20	267	254	258	252	254	252	0	246	255	247	242	250	259	254	250	250	253	264	253
-30	272	273	273	267	279	269	э	267	273	269	263	260	269	264	261	262	269	264	268
-40	290	297	289	285	283	305	э	286	280	281	290	291	267	276	252	3ü 2	290	282	287
-50	346	337	307	301	312	344	J	30 6	291	294	C	315	284	289	323	336	325	338	318
-60	354	344	348	332	311	340	324	321	320	334	341	3 38	327	345	342	338	349	348	335
-70	329	324	319	318	325	321	330	322	324	328	331	342	331	323	319	327	347	341	327
-80	312	318	303	312	312	.314	316	325	338	333	320	316	311	311	314	317	317	330	317



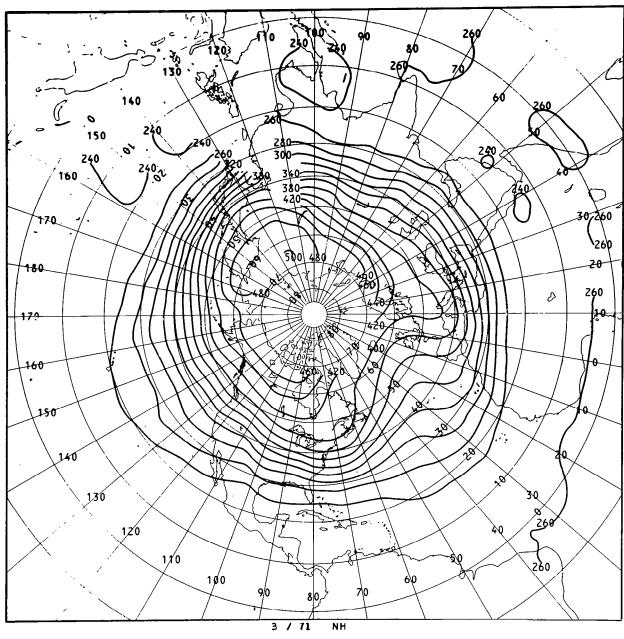
								2 /	71	NH									
LATITUDE					EAS	Γ				Ł) N C	. 1	r u i	3 (ZONAL
	e	20	40	60	8Ç	100	1 20	140	1 60	180	200	220	240	260	2 8 0	300	326	340	MEAN
86	0	C	0	0	0	٥	0	o	0	0	0	c	0	0	0	O	O	0	0
70	0	421	0	0	0	0	0	C	0	0	0	0	0	0	C	O	40 7	419	425
60	357	404	429	0	O	٥	0	471	454	0	ວ	352	414	423	45€	462	397	395	421
50	349	391	442	413	0	0	0	448	453	401	397	354	366	386	445	418	370	333	396
40	347	380	364	350	359	٥	0	440	3 93	387	301	293	314	346	325	387	331	329	348
30	302	30 3	290	273	270	0	0	0	247	243	263	266	281	242	264	279	299	293	275
20	238	234	234	232	233	0	0	0	221	237	229	242	238	229	236	243	255	233	235
10	253	243	237	241	234	233	0	G	233	234	236	243	238	236	243	ű	246	244	239
0	262	254	249	249	245	240	0	0	244	245	242	246	249	O	O	245	257	258	248

TOTAL OZONE FEBRUARY 1971



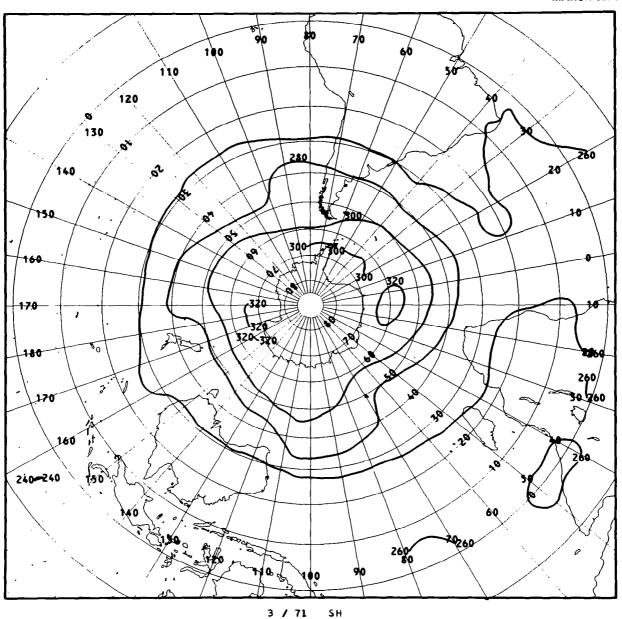
								2 /	71	211									
LATITUDE					EAS	T				L) N C	; I ;	r U I	DE					ZONAL
	G	29	40	60	80	100	120	140	160	180	200	220	240	260	2 8 0	300	320	34C	MEAN
0	262	254	249	249	245	240	ű	0	244	245	242	246	249	0	0	245	257	258	248
-10	262	253	251	245	241	239	0	C	242	240	244	251	253	250	245	256	268	269	250
-20	261	252	251	250	C	0	0	251	251	251	242	255	257	253	255	258	O	263	252
- 30	271	266	268	265	270	265	0	269	274	270	269	261	262	265	265	263	259	267	266
-40	286	290	276	277	294	0	0	279	259	273	282	273	275	277	255	290	290	285	282
-50	319	316	288	287	325	0	0	283	273	288	349	309	282	290	256	311	326	314	299
-60	347	341	333	322	332	0	0	312	294	290	323	329	313	307	324	329	339	339	325
-70	335	327	325	310	309	311	U	0	292	314	311	321	313	309	323	316	0	343	318
-80	0	299	301	290	288	292	292	295	0	0	292	285	287	278	282	289	364	31 7	294

TOTAL OZONE MARCH 1971



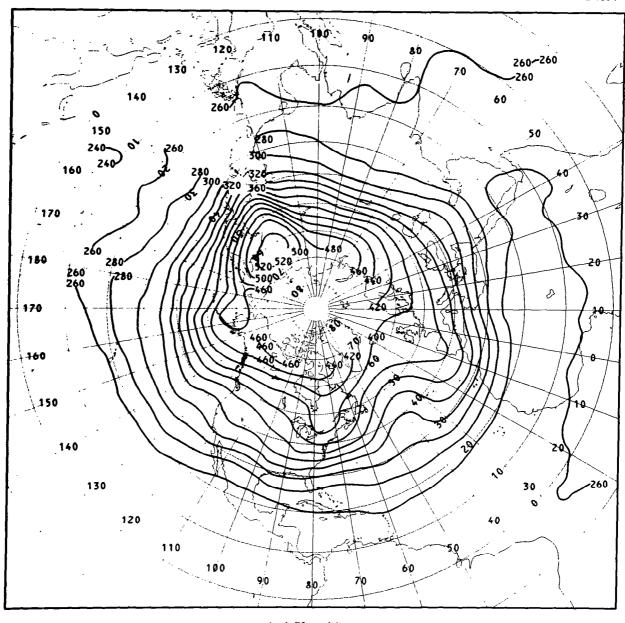
LATITUDE					EAS'	Г				L) N (; I ;	FUI	DΕ					ZONAL
	0	20	40	60	80	100	120	140	160	180	20G	220	240	260	280	300	320	340	MEAN
80	444	0	o	0	٥	481	477	C	440	413	O	466	0	0	C	0	0	O	446
70	430	435	501	532	537	467	511	502	C	460	471	494	462	471	4 60	442	437	422	472
66	394	410	424	418	459	486	491	497	514	492	474	421	442	441	429	410	392	373	441
50	402	40 3	417	378	377	433	461	471	444	428	412	411	391	414	422	419	397	342	408
40	382	383	351	342	310	413	388	329	354	345	312	328	314	386	372	372	317	338	351
30	310	299	279	268	258	269	294	293	270	272	281	282	278	274	257	289	304	340	284
20	244	241	243	250	239	245	0	245	245	247	257	262	244	239	244	25 3	271	254	248
10	252	246	246	249	243	229	0	235	246	245	244	244	244	245	242	245	249	253	245
C	263	256	264	258	264	ə	0	250	248	249	254	251	252	255	252	252	255	263	254

TOTAL OZONE MARCH 1971



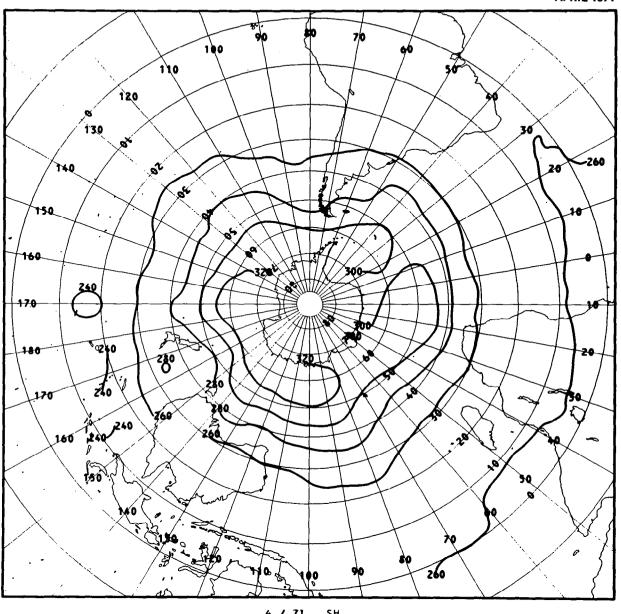
LATITUDE					EAST	r				L) N (3 I 1	rui	E					ZONAL
	ij	20	40	60	86	100	120	140	16û	186	200	22C	240	260	280	306	320	340	MEAN
U	263	256	264	258	264	Ü	3	250	248	249	254	251	252	255	252	252	255	263	254
-10	266	253	254	247	245	236	242	246	239	244	251	252	255	252	247	242	260	263	250
-2C	260	249	260	252	242	237	234	242	241	233	244	247	252	250	245	244	253	261	248
-30	265	263	267	264	265	270	259	26C	269	265	259	258	265	268	257	258	254	268	263
-40	292	280	274	272	288	295	275	26 <i>2</i>	268	27C	284	269	260	276	328	280	280	289	278
-50	308	29 0	281	274	302	321	289	276	273	278	298	288	288	275	274	303	300	298	292
-60	316	331	302	316	314	294	334	319	275	310	325	304	297	304	307	288	348	310	311
-7ŭ	303	309	313	296	318	312	298	32 <i>€</i>	345	322	326	322	312	315	253	36.2	3¢ 6	289	309
-80	278	297	305	302	297	307	324	304	0	296	288	291	287	279	277	285	292	272	295

TOTAL OZONE APRIL 1971



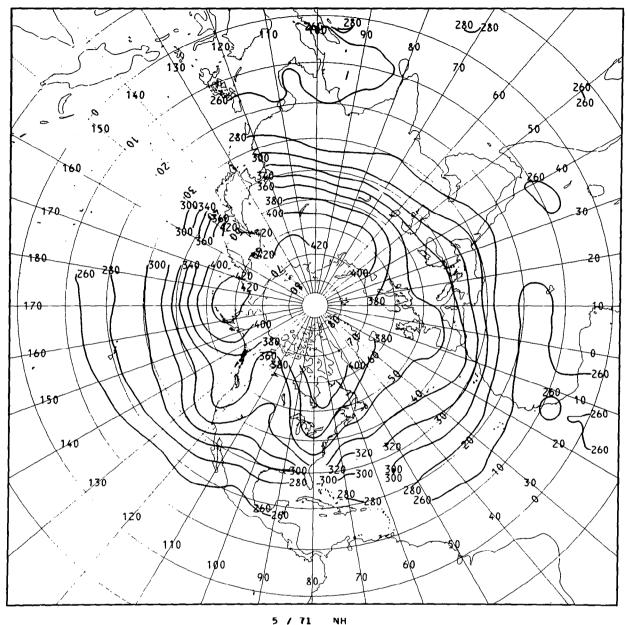
								4 /	71	NH									
LAT I TUDE					EAS	r				ι) N (G I	เ บ เ	DE					ZONAL
	0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	34¢	MEAN
80	425	433	446	448	483	490	443	455	443	455	455	472	482	446	423	412	41 4	413	444
70	419	425	435	48G	505	502	513	528	0	457	460	474	488	514	461	452	4 0 3	410	463
60	400	478	435	432	454	431	522	558	546	٥	492	446	436	421	44C	426	399	373	440
50	385	396	392	388	371	417	O	432	3 59	401	479	421	387	338	42C	396	319	371	396
40	359	343	333	315	299	302	323	360	349	350	326	360	357	337	412	383	326	356	343
30	334	278	296	264	272	284	290	282	281	299	3C9	301	307	293	252	292	308	324	294
20	247	253	253	262	262	258	271	264	250	288	272	256	256	247	25€	275	266	260	259
10	251	257	253	266	252	261	263	G	241	255	243	252	244	245	247	0	250	250	251
0	257	273	264	260	256	256	253	6	246	245	254	252	255	252	257	251	253	262	256

TOTAL OZONE APRIL 1971



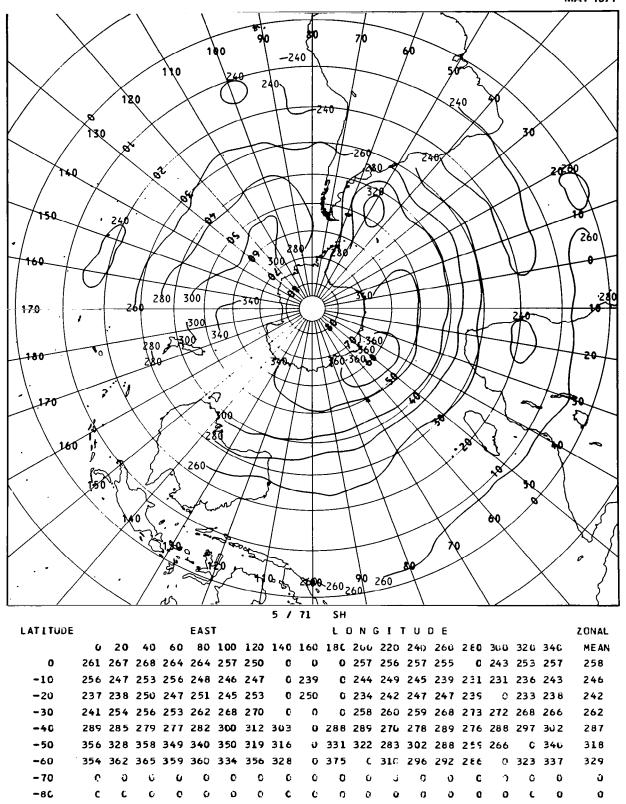
								4 /	71	SH										
LATITUDE					EAST	r				L	N	3 I 1	្រែ	DE					ZONAL	
	G	20	40	60	80	160	1 20	146	160	180	200	220	240	260	2 & C	300	32 J	340	MEAN	
0	257	273	264	260	256	256	253	C	246	245	254	252	255	252	257	251	253	262	256	
-10	258	250	254	258	241	246	244	0	0	242	246	247	251	249	243	245	246	252	248	
-20	254	248	252	247	256	251	248	C	244	237	242	250	247	247	246	241	240	254	247	
-30	248	262	257	256	274	272	256	259	282	282	264	265	260	253	253	259	255	261	261	
-40	284	274	274	274	294	294	269	258	274	262	266	279	281	291	25€	274	302	284	278	
- 50	32¢	340	300	287	316	323	314	318	264	301	0	297	300	285	275	296	323	277	297	
-60	294	30 9	327	313	303	343	345	351	O	336	332	328	294	•	275	295	334	364	317	
-70	289	291	290	303	295	317	309	340	Ú	326	320	325	328	334	337	360	306	277	308	
-80	0	0	U	0	a	0	٥	0	۵	a	Ü	G	a	0	C	a	0	i.	0	

TOTAL OZONE MAY 1971



								, ,		.40										
LAT I TUDE					EAS	ī				L	0 N (G I	T U I	DE					ZONAL	
	C	20	46	60	85	LCO	1 2C	146	160	180	266	220	240	260	2 & G	300	326	340	MEAN	
80	392	401	410	4 (8	408	414	403	40 \$	405	467	4C 5	393	391	409	4 C 7	386	39¢	393	400	
70	368	393	390	415	416	41G	432	0	Ú	386	407	398	386	399	405	416	384	381	401	
60	373	380	380	419	411	423	429	388	O	G	421	432	345	336	369	41 6	369	385	391	
50	373	353	351	375	380	369	408	426	õ	429	428	362	403	370	464	367	365	366	378	
40	362	337	332	307	320	309	355	C	C	345	326	335	364	327	429	326	340	363	338	
30	305	292	294	277	274	266	295	0	291	290	295	304	317	0	C	316	313	321	296	
20	254	263	264	271	262	260	269	C	266	279	274	268	269	248	260	6	277	265	266	
10	262	266	259	266	263	258	256	0	247	C	249	252	248	250	241	G	259	258	255	
0	261	267	268	264	264	257	250	0	0	0	257	256	257	255	0	243	253	257	258	

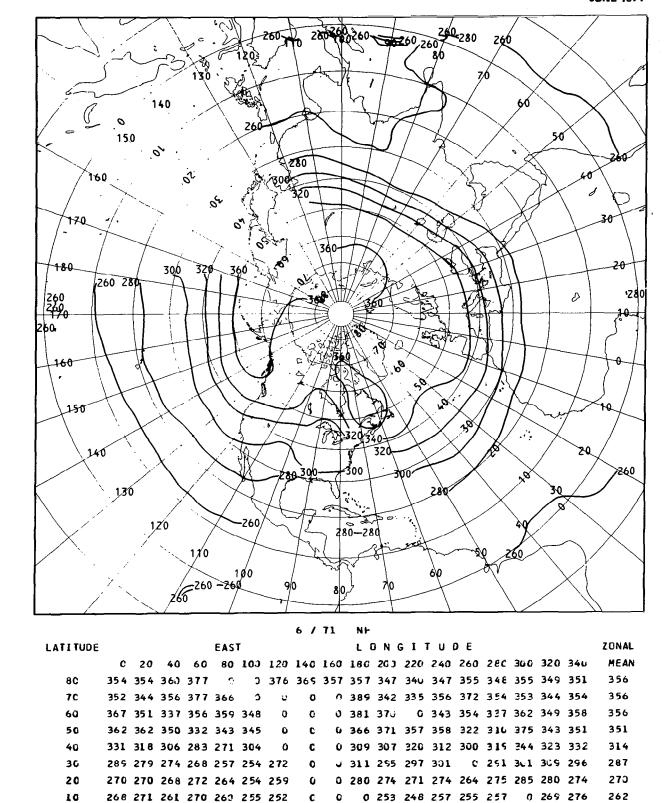
TOTAL OZONE MAY 1971



TOTAL OZONE JUNE 1971

260

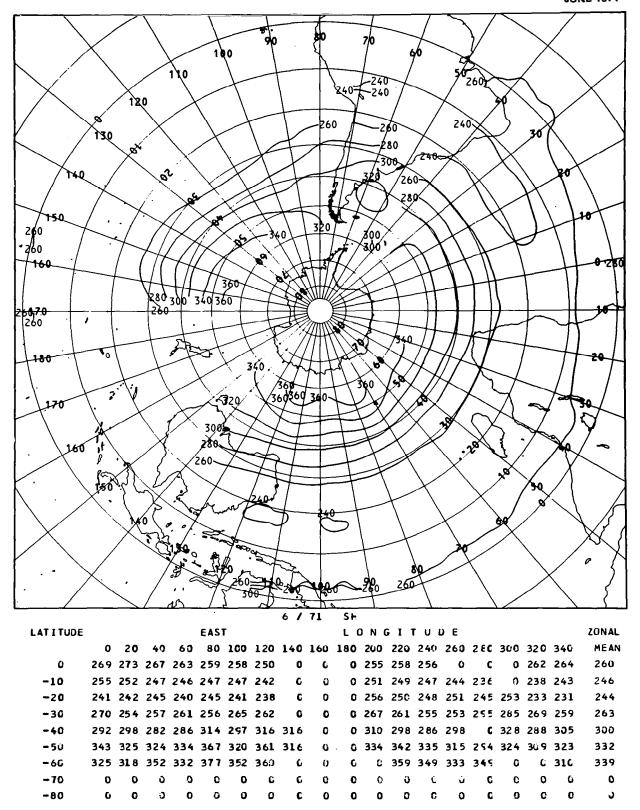
0 262 264



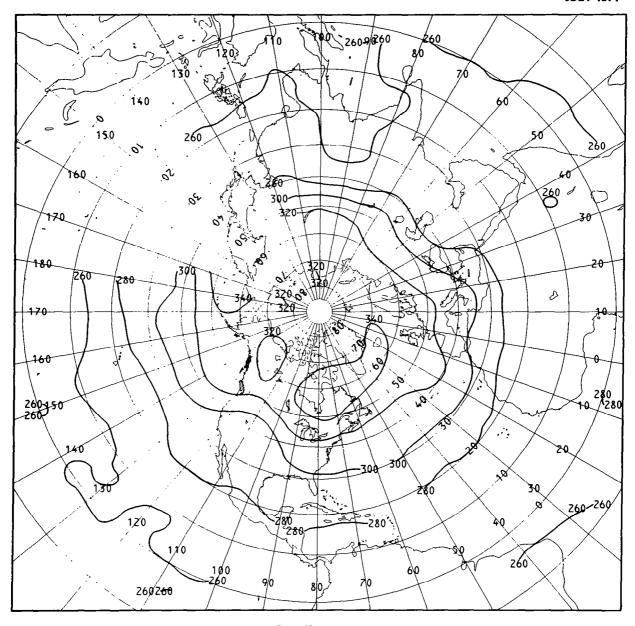
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269 273 267 263 259 258 250

TOTAL OZONE JUNE 1971

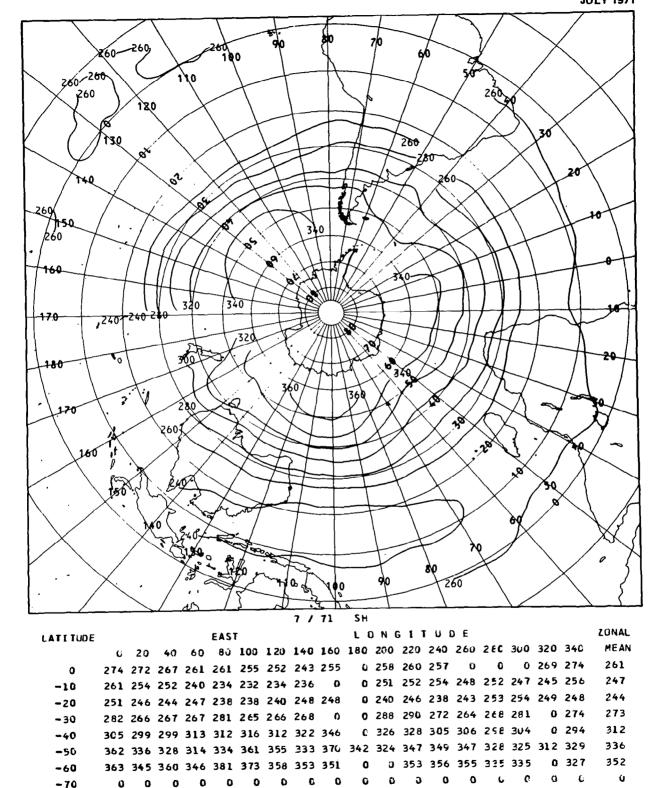


TOTAL OZONE JULY 1971



								7 /	71	NH										
LAT I TUDE					EAS	Г				Ł) N C	3 T 3	TUI	D E					ZONAL	
	Ü	20	4ü	60	8 C	103	120	140	160	180	200	220	240	260	2 8 0	30 <i>0</i>	32 C	340	MEAN	
80	340	337	335	332	Ü	٥	308	317	329	322	319	318	318	323	318	313	318	337	322	
70	337	333	328	335	332	C	Ö	¢	Ü	305	327	325	328	331	342	348	332	351	332	
66	340	335	188	301	350	328	٥	G	O	358	333	G	317	338	351	356	339	346	335	
50	323	323	301	291	317	309	Ü	C	Ü	344	332	322	336	342	355	338	318	326	325	
40	303	31 3	271	272	271	267	O	G	'n	300	31c	314	288	305	317	301	31 o	318	297	
30	284	288	276	271	255	260	274	266	265	291	296	287	366	290	255	294	292	298	284	
20	274	273	268	272	258	259	266	273	275	280	266	271	281	275	283	282	275	278	271	
10	277	274	255	268	262	253	258	255	255	0	256	257	261	277	264	287	271	275	263	
c	274	272	267	261	261	255	252	243	255	Ĺ	258	260	257	O	C	ð	269	274	261	

TOTAL OZONE
JULY 1971



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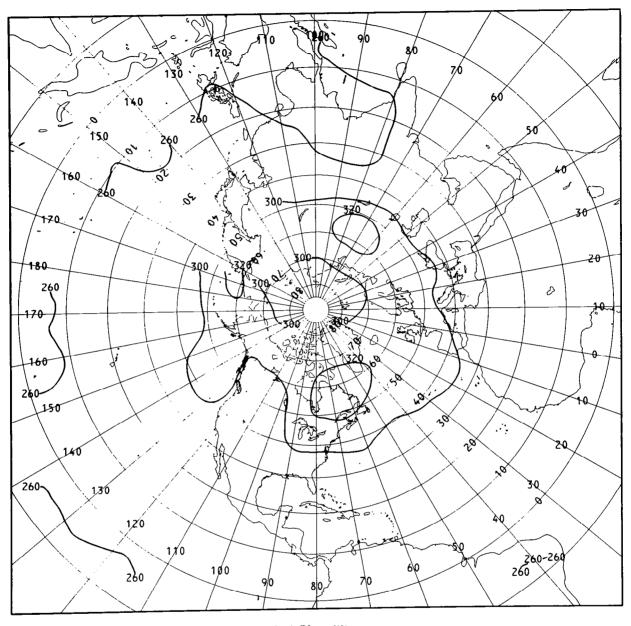
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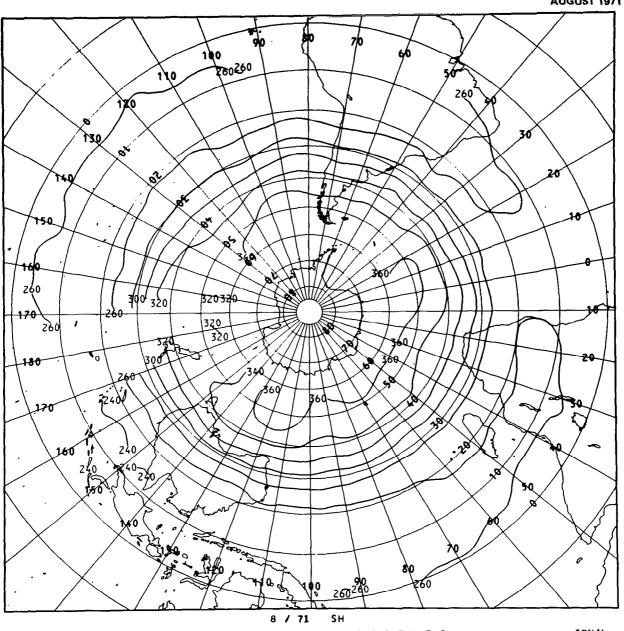
C

TOTAL OZONE AUGUST 1971



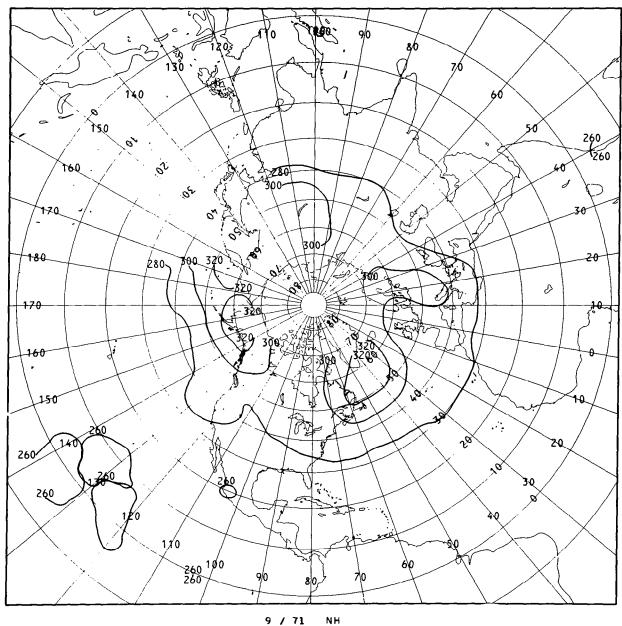
								8 /	71	NH									
LATITUDE					EAST	Γ				LO) N (; I 1	ប្រ	E					ZONAL
	C	20	40	60	86	160	120	146	160	180	200	220	240	260	280	3U O	320	340	MEAN
80	292	284	278	274	O	D	275	281	277	284	293	296	304	316	300	253	294	30 5	290
70	310	303	308	313	304	O	O	0	0	G	310	30 3	303	316	314	312	309	313	307
60	309	30 7	316	329	329	313	o	0	0	321	309	289	301	296	321	336	319	324	314
50	327	300	307	309	323	302	ن	C	0	31 1	294	333	283	294	313	314	320	314	309
40	291	291	282	278	269	2 80	o	C	0	279	289	298	289	297	3¢7	297	296	3U 8	290
36	277	283	268	266	263	258	2 72	276	284	283	286	286	296	285	289	290	292	282	279
20	272	268	264	267	259	256	264	266	263	269	270	274	269	275	275	273	276	274	268
10	270	268	261	270	263	261	259	263	262	0	259	271	268	269	272	271	277	273	266
0	275	264	268	266	257	257	254	260	261	0	260	263	264	266	O	263	272	275	264

TOTAL OZONE AUGUST 1971



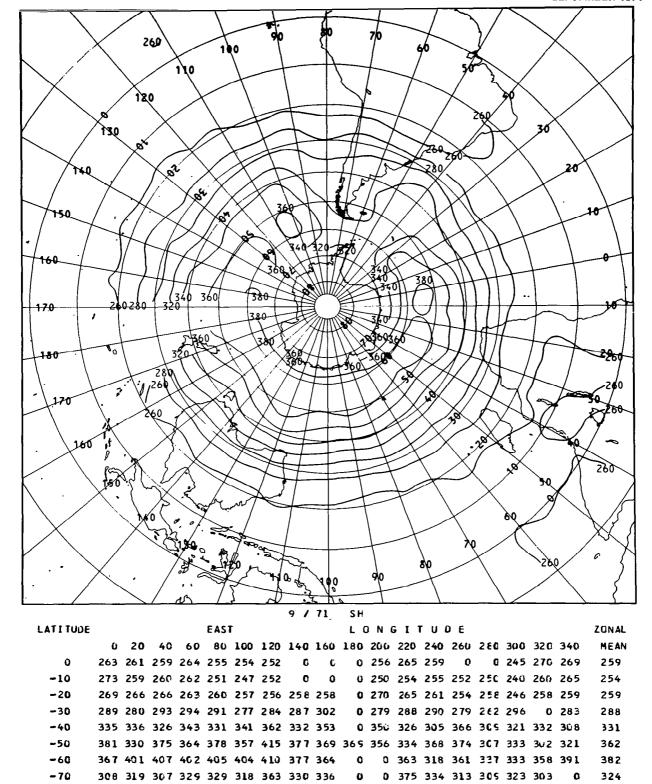
								• ,		3.,									
LAT I TUDE					EAST	r				LO	NO	; 1 ;	ru) E					ZONAL
	ú	20	40	60	80	103	120	140	160	180	200	220	240	26 Ç	280	300	320	34ü	MEAN
0	275	264	268	266	257	257	254	260	261	G	260	263	264	266	C	263	272	275	264
-10	268	256	258	254	244	244	244	243	241	C	252	255	251	254	254	259	257	262	252
-23	258	261	264	263	257	257	251	246	243	o	249	250	254	250	244	254	248	260	253
-30	292	292	291	281	296	294	282	291	2 75	0	287	281	269	272	308	282	262	284	284
-40	325	327	336	339	329	3 38	352	363	332	0	336	312	301	325	317	336	330	336	330
~ 50	350	342	329	342	362	350	384	331	324	314	327	331	336	379	365	365	365	364	348
-60	395	366	363	363	386	369	385	324	328	0	0	325	353	338	342	348	343	355	354
-70	325	33 2	321	337	334	317	3 26	320	321	Q	۵	347	316	328	336	G	e	e	328
-80		n			ڼ			_											ა

TOTAL OZONE SEPTEMBER 1971



LATITUDE LONGITUDE ZONAL EAST 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 326 340 MEAN 80 309 283 274 309 271 275 U 280 279 327 310 254 289 287 305 289 70 310 318 295 295 309 0 345 330 308 290 283 255 301 315 324 304 60 278 308 301 297 301 298 0 339 348 0 324 D 271 297 349 300 305 50 280 321 285 278 288 304 0 310 298 285 274 320 288 321 315 272 299 0 256 259 279 287 272 288 267 291 299 295 301 257 269 283 306 40 0 283 30 275 276 255 266 258 254 268 0 275 275 270 271 271 273 278 274 276 270 0 20 264 261 261 263 251 246 251 0 261 256 266 256 260 261 265 269 266 261 C 10 269 260 255 260 256 250 253 U 253 257 258 257 262 271 265 268 261 263 261 259 264 255 254 252 C 256 265 259 Ð C 245 270 269 259

TOTAL OZONE SEPTEMBER 1971



0 304 284 314 311 324

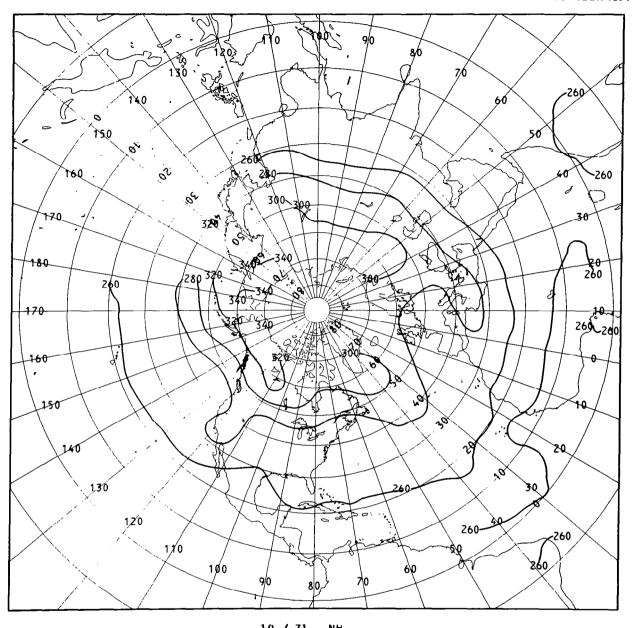
Û

0 299 258 290 289 267

-80

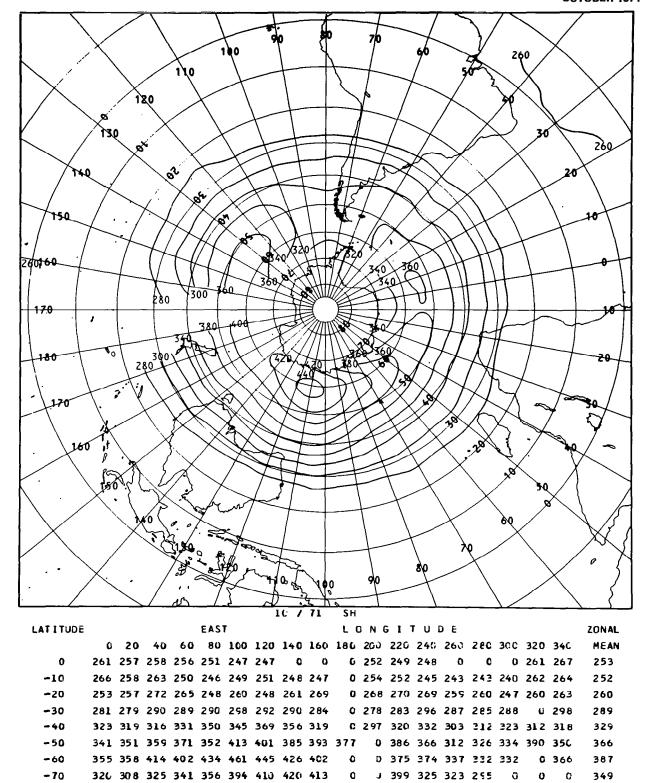
240 289 266 262

TOTAL OZONEOCTOBER 1971



								10 /	/1	NH									
LATITUDE					EAST	r				L) N C	G I	rua	Œ					ZONAL
	¢	20	40	60	80	100	120	140	160	186	20U	220	240	260	2 E C	30 G	320	340	MEAN
80	Ü	0	Ú	Ü	0	0	0	C	0	0	G	0	c)	υ	Ú	0	Ü	Ü	0
70	298	295	3û 1	285	302	9	0	C	0	C	321	295	301	309	313	32ú	295	295	308
60	278	298	295	310	301	297	0	350	0	0	O	316	329	0	308	313	329	309	311
5 u	261	276	304	292	279	288	0	344	0	320	312	288	294	291	288	287	300	286	295
40	275	286	279	272	271	284	0	C	0	260	267	261	291	257	2€€	264	284	273	275
30	276	274	259	259	254	242	255	0	0	261	262	273	279	259	274	272	277	273	265
20	255	254	254	253	247	243	24)	0	251	272	252	250	252	252	256	262	267	258	253
10	266	261	251	257	256	252	249	0	240	0	248	247	246	251	254	250	253	264	252
0	261	257	258	256	251	247	247	C	0	0	252	249	248	0	O	c	261	267	253

TOTAL OZONE OCTOBER 1971



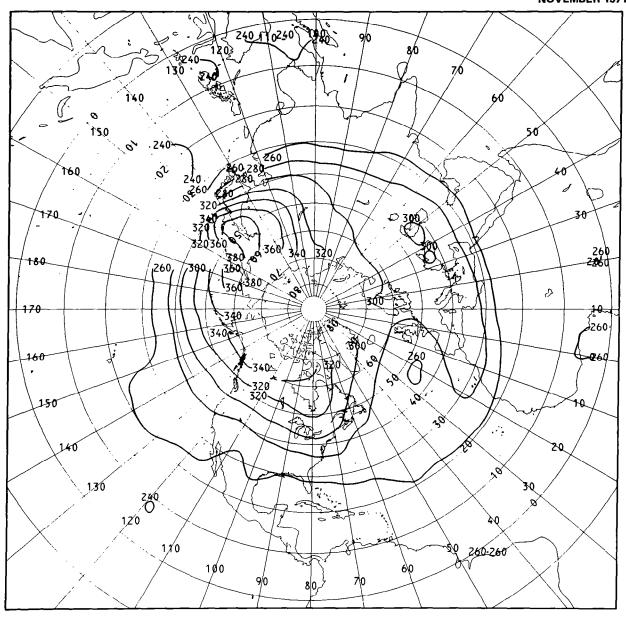
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-80

314

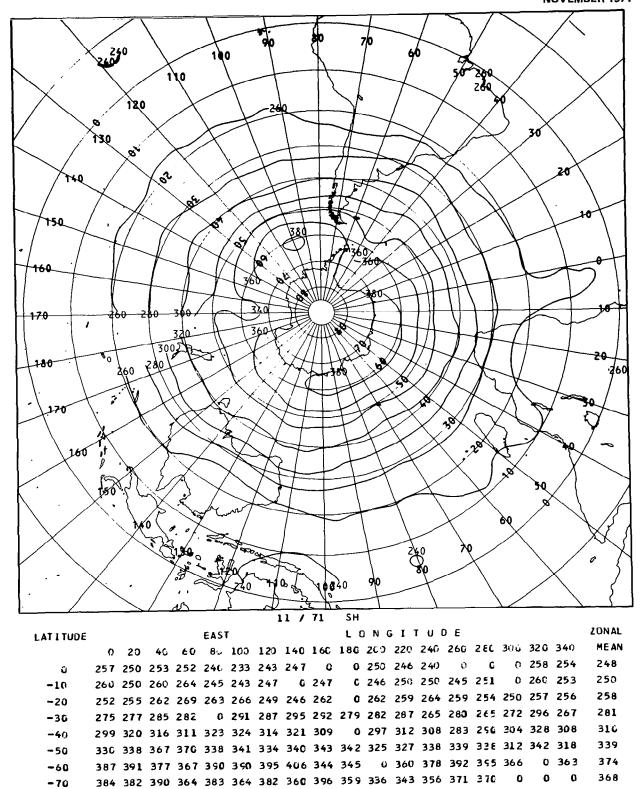
0 295 286 294 288 294

TOTAL OZONE NOVEMBER 1971



								11 /	71	NH									
LATITUDE					EAS	T				L) N C	G I	τυ.	DΕ					ZONAL
	0	20	40	60	80	100	126	146	160	180	200	220	240	260	280	300	32 C	346	MEAN
80	0	0	0	0	0	0	ū	G	0	G	υ	0	υ	ΰ	Ü	0	C	0	0
70	U	0	0	0	C	0	o	O	0	O	C	O	Ü	9	C	0	O	C	G
60	287	293	294	289	320	316	364	C	O	O	D	G	378	0	319	316	284	289	318
50	273	287	303	284	290	313	0	O	o	342	317	315	307	317	326	291	267	259	309
40	282	296	300	299	290	310	o	307	300	298	279	289	280	258	284	279	266	259	290
30	284	263	254	260	258	256	241	247	0	256	255	264	269	257	267	262	279	274	262
20	242	244	245	249	25ύ	248	249	C	240	249	252	258	255	254	24C	243	253	259	248
10	262	249	243	246	248	245	247	244	242	0	244	243	237	250	247	250	248	249	246
0	257	250	253	252	240	2 33	243	247	0	O	250	246	240	0	C	ij	258	254	248

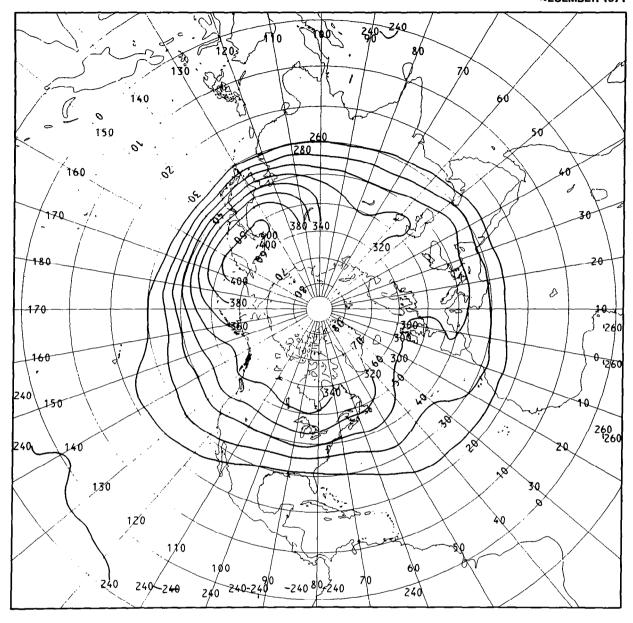
TOTAL OZONE NOVEMBER 1971



377 340 353 358 358 347 347 372 371 365 325 336 366 353 242 363 361 375

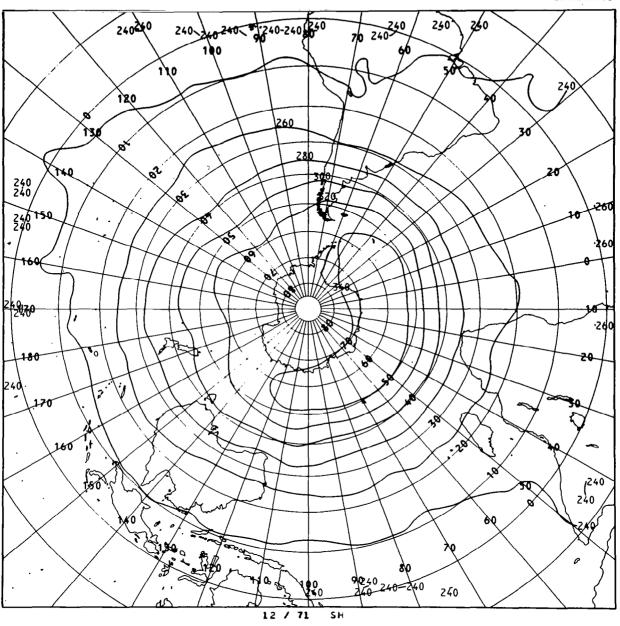
-80

TOTAL OZONE
DECEMBER 1971



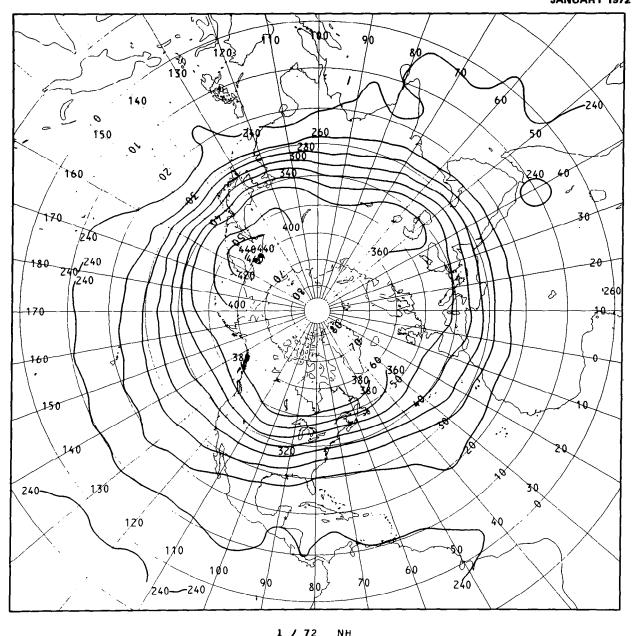
							1	12 /	71	NE									
LATITUDE					EAST	ī				L) N (3 I 1	rua) E					ZONAL
	0	20	40	60	68	100	120	140	160	180	200	223	240	260	2 E C	300	320	340	MEAN
80	C	0	9	0	a	0	3	0	U	G	C	e	0	0	Ç	1	O	С	0
70	٥	G	0	0	0	٥	0	G	0	0	Ü	Ü	Ð	0	0	0	0	G	٥
60	368	286	302	342	341	315	0	0	0	0	c	ن	C	346	363	345	353	301	337
56	307	30 4	322	364	311	336	385	409	406	403	328	330	363	338	334	344	340	30£	344
40	369	300	331	297	301	321	352	335	0	302	292	369	321	294	293	3U3	297	288	311
36	285	281	295	281	257	287	257	241	237	284	265	281	291	254	257	272	279	290	269
20	244	242	251	248	242	244	223	223	242	253	266	246	250	239	241	251	255	251	244
10	247	246	240	238	234	235	233	232	238	248	242	244	241	246	242	237	246	248	241
Ü	255	252	247	235	232	230	232	249	225	244	242	243	243	237	233	245	251	254	241

TOTAL OZONE
DECEMBER 1971



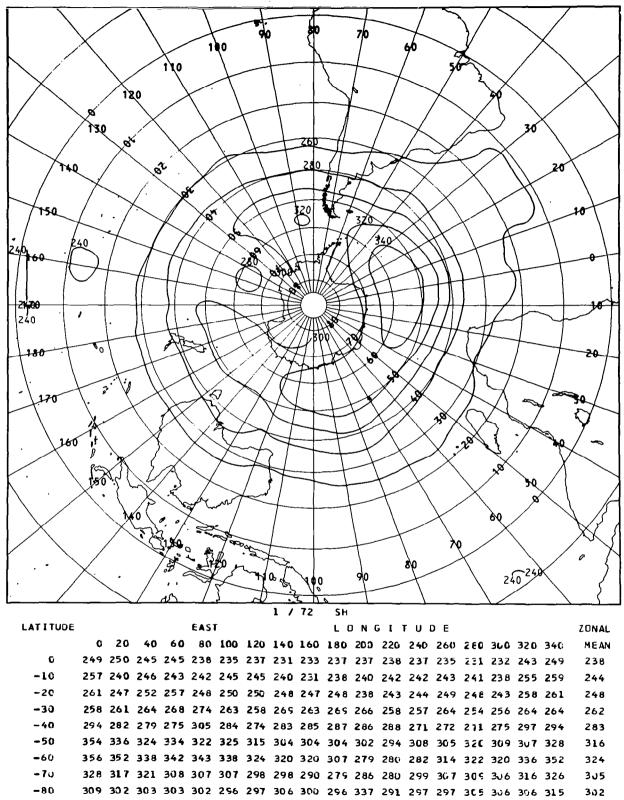
									-	•										
LAT I TUDE					EAST	r				L) N (3 I 1	T U (E					ZONAL	
	O	20	40	60	80	100	120	140	160	180	200	220	240	260	260	30¢	320	346	MEAN	
0	255	252	247	235	232	230	232	249	225	244	242	243	243	237	233	245	251	254	241	
-10	259	245	253	242	243	238	248	244	245	247	243	252	249	239	247	251	254	256	246	
-20	254	252	256	257	251	250	264	252	248	239	243	251	260	252	254	250	253	255	252	
-30	272	276	273	272	278	275	269	277	270	a	266	266	268	275	264	25 7	261	272	269	
-40	294	298	307	317	299	304	299	316	286	289	303	279	274	295	255	3 ₆ 3	310	292	294	
-50	316	329	345	361	372	341	358	334	310	322	318	316	299	305	330	329	344	345	329	
- 60	359	356	358	372	362	342	347	351	322	309	337	332	317	319	341	340	358	357	343	
-70	342	33 9	329	330	326	322	331	348	333	325	327	339	318	332	333	339	339	351	335	
-8ú	317	317	317	315	321	326	339	340	353	342	337	341	320	33 ₀	335	344	341	332	332	

TOTAL OZONE JANUARY 1972

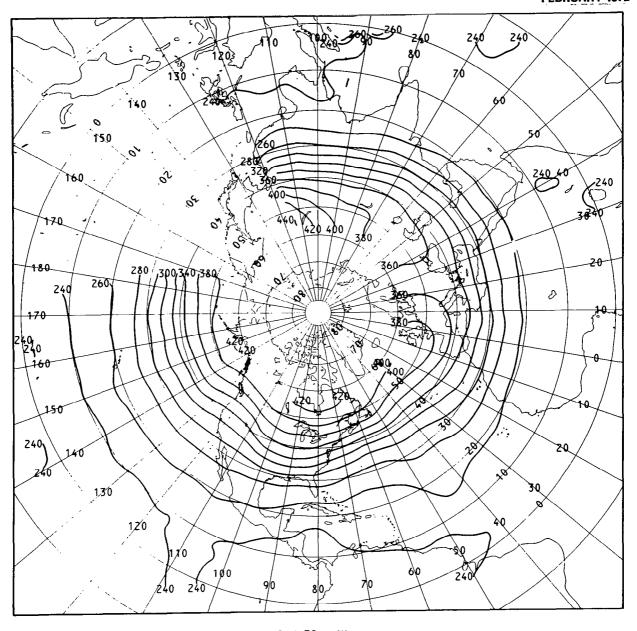


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LATITUDE					EAS	Г				L	3 N C	3 1 3	า บ	DE					ZONAL
	0	20	40	60	80	100	120	140	1 60	186	200	226	240	260	2 EC	300	320	34C	MEAN
80	C	Q	С	0	0	0	Ü	C	0	Ü	٥	C	υ	•)	C	o	C	Ü	o
70	0	c	0	C	0	0	0	0	0	0	Ü	Ü	0	Ü	Q	Ù	U	O	O
60	340	337	337	352	396	0	377	C	G	0	Э	0	0	411	403	411	372	372	378
50	345	352	366	415	363	376	417	372	378	420	372	353	372	406	405	356	380	335	374
40	344	353	353	368	310	304	345	325	347	338	322	314	316	333	3 0 7	290	316	316	331
30	294	282	310	276	269	277	o	273	290	270	283	291	293	276	255	259	268	279	276
20	252	251	244	243	240	231	239	223	242	253	253	255	256	247	239	255	262	251	247
10	246	248	237	241	238	234	233	230	237	233	238	238	237	243	236	240	245	244	239
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TOTAL OZONE JANUARY 1972

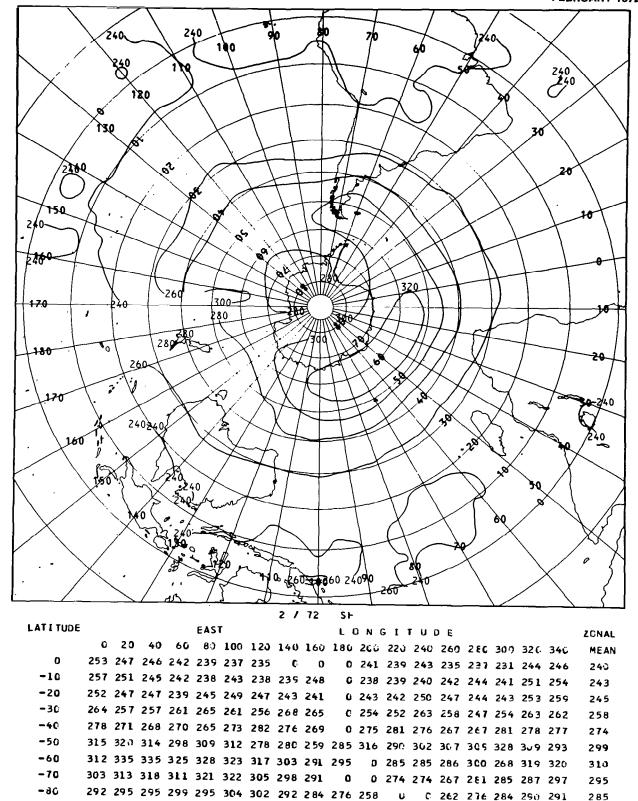


TOTAL OZONE FEBRUARY 1972



								2 /	72	NH									
LATITUDE					EAS"	r				L	N C	; [;	rui) E					ZONAL
	c	20	40	60	80	160	120	146	16ü	180	200	220	240	260	280	30 J	320	34ü	MEAN
86	C	Ü	o	o	o	0	O	e	0	e	0	U	Ü	c	G	0	ŋ	C	Ü
70	318	366	o	0	410	0	ა	Ĺ	C	Ĺ	C	Ü	Ü)	c	Ü	380	O	384
60	383	371	353	374	390	422	0	0	O	0	Ü	0	469	419	394	428	417	467	400
50	400	355	341	378	374	408	a	411	Ú	395	402	412	383	397	415	430	397	396	394
40	372	347	333	359	336	376	o	0	O	348	350	345	324	362	358	351	324	333	348
30	305	295	309	308	302	279	255	0	0	285	289	294	292	294	286	270	278	316	290
20	254	256	258	256	245	240	242	G	C	260	25G	256	263	261	245	261	262	262	255
10	246	248	236	245	244	241	243	0	C	0	240	237	235	240	238	244	249	249	242
0	253	247	246	242	239	237	235	e	O	0	241	239	243	235	237	231	244	246	240

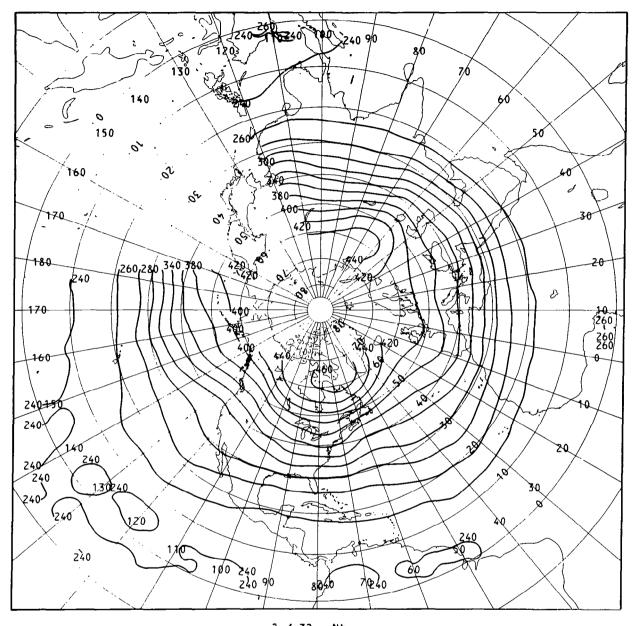
TOTAL OZONE FEBRUARY 1972



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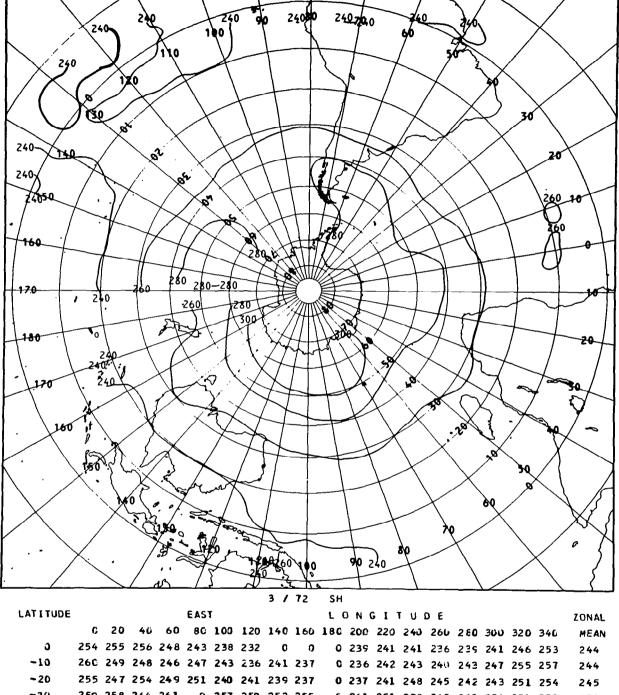
0 262 276 284 290 291

TOTAL OZONE MARCH 1972



								3 /	72	NF										
LATITUDE					EAS	T				Ł) N (3 I .	τυ 1	DΕ					ZONAL	
	C	20	40	6 C	8¢	100	120	140	1 60	180	260	220	240	260	280	30 L	32 J	346	MEAN	
80	0	0	0	423	2	o	Ü	0	G	C	c	£	C	õ	443	0	Ü	C	449	
70	425	394	382	415	444	c	O	C	ပ	483	458	461	432	449	459	469	446	443	438	
60	419	412	460	449	470	439	Ü	C	O	Ü	Ü	Ĺ	408	469	454	460	435	420	441	
Sü	406	373	410	417	388	381	Ü	0	0	365	375	383	373	40e	417	405	361	377	389	
40	358	356	385	C	344	337	C	6	C	366	362	32u	293	335	358	346	335	355	348	
30	312	301	326	295	278	278	284	C	G	253	295	285	317	300	250	294	30 6	314	299	
20	262	250	259	253	253	251	250	0	0	255	257	273	281	263	262	272	271	274	262	
10	254	253	25 u	255	255	240	236	Ç	G	0	242	248	246	241	243	246	249	25 0	246	
0	254	255	256	248	243	238	2 32	0	O	0	239	241	241	236	239	241	246	253	244	

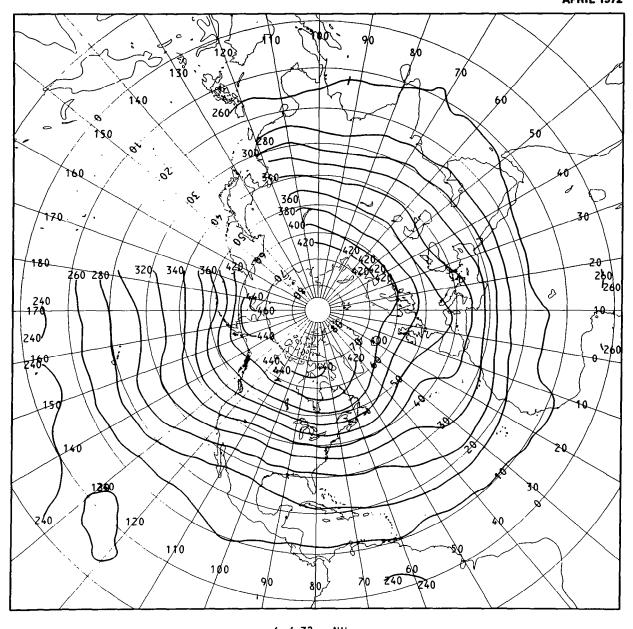
TOTAL OZONE MARCH 1972



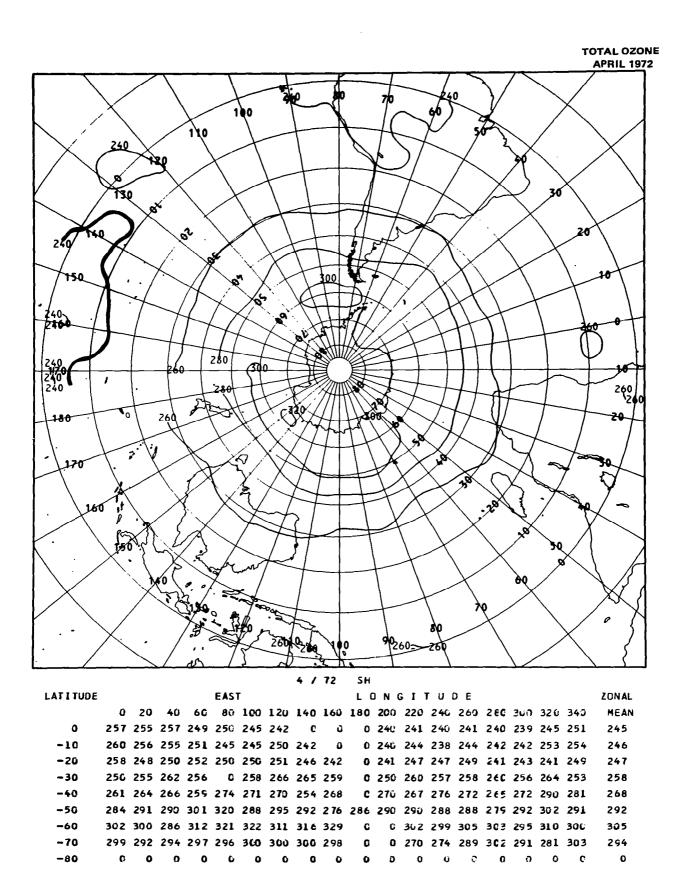
259 258 264 261 ~30 0 257 250 252 255 0 261 251 258 263 261 254 251 255 256 -46 278 272 276 275 279 271 265 262 261 0 277 263 262 258 279 273 265 264 270 -50 275 297 280 276 281 290 293 279 286 259 283 298 281 253 277 282 290 277 282 298 281 301 315 315 320 320 3G3 288 ~60 0 278 278 269 274 290 287 278 292 -70 282 298 292 295 301 309 317 312 310 Ū 0 278 272 266 281 286 286 271 292 308 302 305 296 294 298 306 300 288 281 274 ~80 G 0 273 274 289 292 286 292

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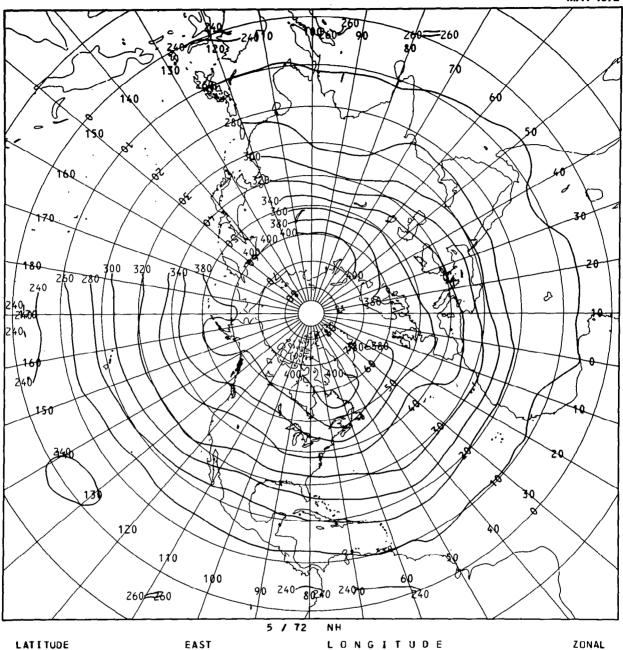
TOTAL OZONE APRIL 1972



								4 /	12	NH										
LATITUDE					EAST	r				L) N C	G I	Tυ	DΕ					ZONAL	
	O	20	40	60	80	160	1 20	140	160	180	200	220	240	260	280	300	320	346	MEAN	
80	420	423	457	477	t)	c	9	471	443	444	428	423	450	447	437	411	405	416	437	
70	405	425	454	430	443	O	U	0	0	421	0	405	479	467	445	437	411	407	438	
60	394	411	395	39C	402	422	Ç	0	0	438	442	439	418	414	440	427	413	387	413	
50	379	371	347	35G	352	382	0	0	0	395	389	380	389	399	351	391	363	357	378	
40	364	350	335	0	354	350	Đ	O	0	336	335	341	332	311	353	353	331	329	339	
30	321	318	307	299	296	250	293	0	0	31 9	304	313	288	360	306	292	3ü 4	328	304	
20	264	261	264	272	270	268	261	C	O	298	285	283	272	272	279	284	286	284	273	
10	260	257	253	259	258	249	255	0	0	0	253	253	251	260	259	265	255	259	255	
a	257	255	257	249	250	245	242	0	6	Ω	240	241	240	241	240	239	245	251	245	



TOTAL OZONE MAY 1972



LAT I TUDE					EAS	Т				L	וא כ	3 I 3	រ ប	E					ZONAL
	0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	34C	MEAN
80	373	385	394	403	363	0	3 95	393	395	398	397	392	412	4ù3	4C2	380	368	370	389
70	374	378	388	409	410	0	407	C	398	390	399	393	399	405	466	398	378	378	393
60	374	375	372	407	423	410	3	419	G	382	372	C	382	395	467	469	4ú 3	385	389
50	386	359	354	349	346	342	O	367	C	371	393	381	338	353	373	384	344	358	365
40	355	343	332	0	308	311	0	C	0	342	349	341	325	331	343	350	336	336	336
36	324	295	299	287	278	273	299	G	0	323	32 3	319	315	296	313	321	324	344	307
20	269	267	270	278	274	271	279	O	9	292	282	274	269	266	274	294	280	273	276
10	262	263	255	264	254	258	258	0	252	0	257	252	254	257	248	263	259	259	257
0	256	252	252	253	247	242	238	C	239	0	240	240	240	245	236	238	243	247	243

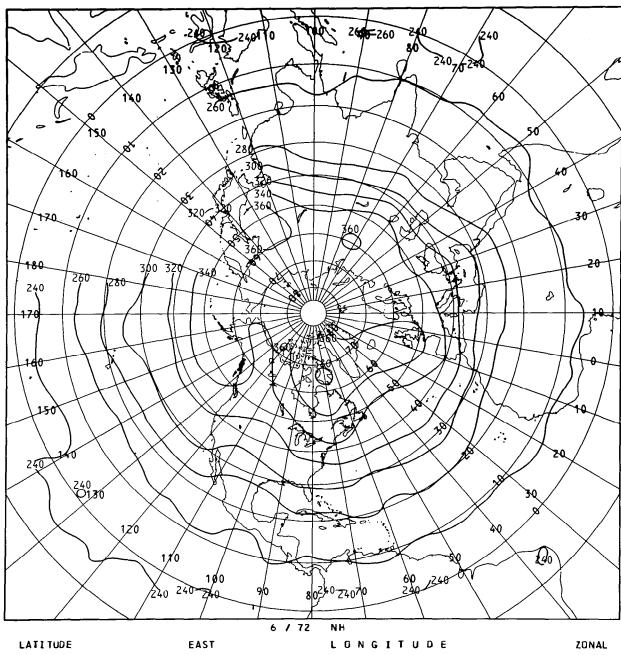
TOTAL OZONE MAY 1972 120 20 240 240 280 260 . 300 240 260 160 260 260 LAT I TUDE EAST LONGITUDE ZONAL 40 60 86 100 120 140 160 180 200 220 240 260 280 300 320 340 MEAN o 256 252 252 253 247 242 238 U 240 240 240 245 236 238 243 247 0 239 243 -10 251 247 250 251 249 248 247 246 238 G 243 239 242 244 244 238 246 248 245 -20 247 246 253 255 254 254 252 258 253 0 247 246 254 259 248 248 246 247 250 **-**3ÿ 267 266 266 252 C 275 255 258 261 0 259 252 263 264 255 270 266 269 263 -40 258 276 271 285 273 273 291 278 292 0 281 295 278 277 272 272 291 289 278 -50 299 292 284 284 293 331 295 287 289 293 315 305 298 304 315 297 308 283 298 305 312 292 325 315 329 326 306 299 317 316 319 298 -60 309 -70 0 0 0

-80

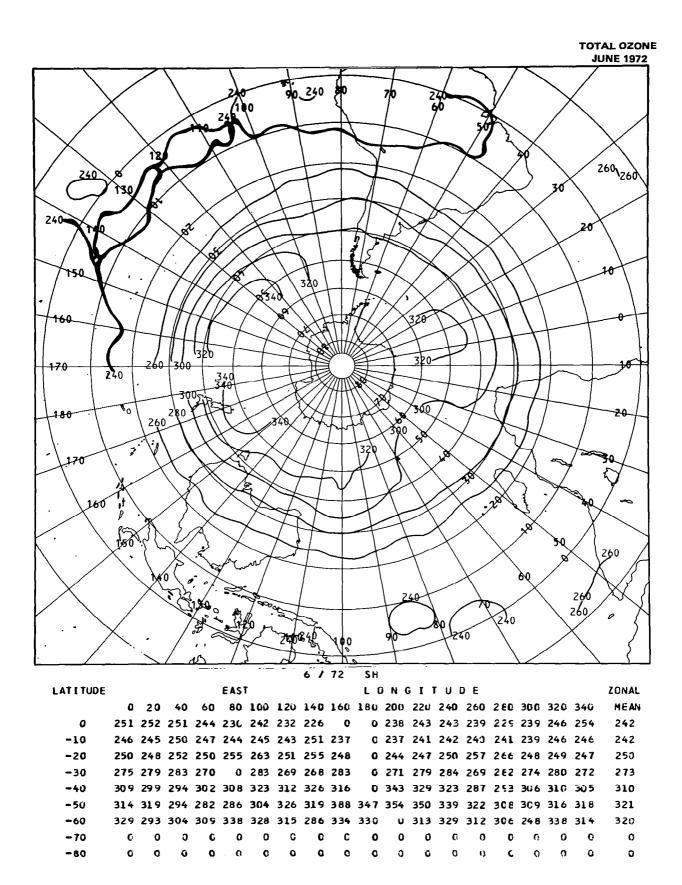
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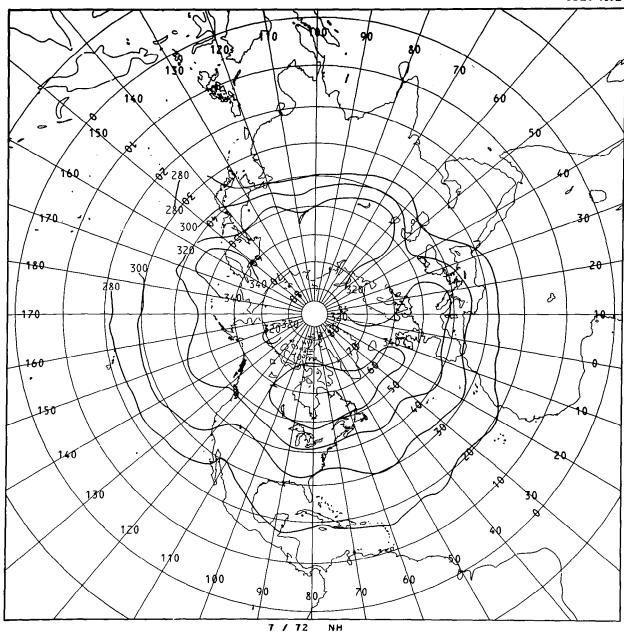
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TOTAL OZONE JUNE 1972



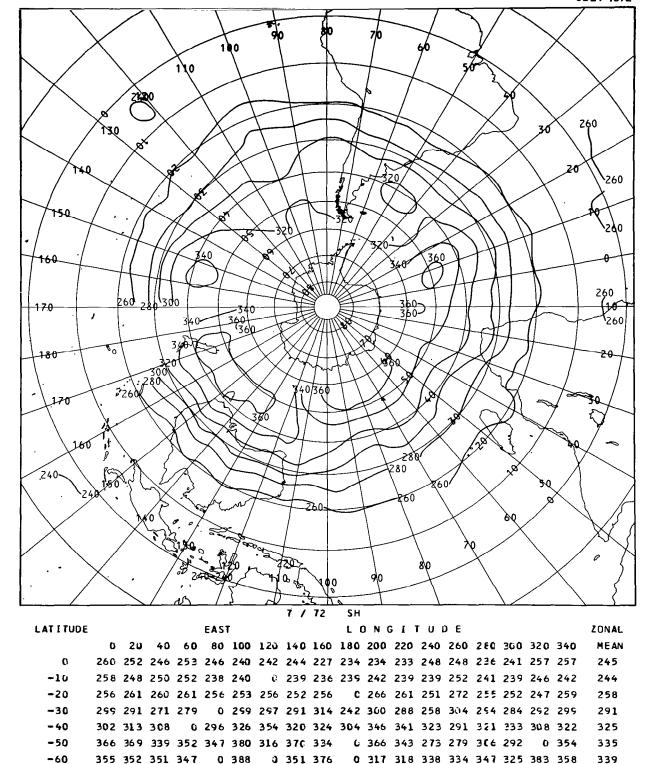
80 100 120 140 160 180 200 220 240 260 280 300 320 340 MEAN 349 342 341 350 356 350 351 361 361 365 357 350 353 368 372 360 358 360 80 355 70 352 343 353 354 35: 331 0 363 323 323 361 364 384 378 360 373 353 0 352 358 334 341 369 389 368 367 366 347 353 357 365 348 334 332 359 60 0 359 364 350 331 340 363 351 324 373 366 342 336 348 348 330 5 C 348 4C 326 323 301 0 297 306 0 308 0 323 323 323 314 313 332 325 329 330 318 30 290 295 278 272 271 262 272 261 0 296 304 305 311 286 362 294 315 291 29ú 20 266 271 270 269 268 260 273 0 280 274 274 262 272 268 275 279 280 268 271 263 266 257 260 262 246 252 248 257 0 252 250 252 250 259 263 261 267 258 10 251 252 251 244 230 242 232 226 0 238 243 243 239 229 239 246 254 0 Û 242





LATITUDE					EAS	r				L) N (GI	τυi	DΕ					ZONAL	
	0	20	40	60	80	100	120	140	160	180	200	220	240	260	2 E C	300	320	340	ME AN	
80	319	323	312	324	339	318	337	325	323	317	345	305	319	337	340	314	317	330	323	
70	333	299	317	314	338	314	304	330	0	0	314	308	325	335	348	348	319	328	323	
60	324	31 3	278	316	336	317	313	30 9	360	0	9	323	341	352	0	339	335	362	332	
50	335	329	309	337	352	325	340	308	366	333	328	325	324	352	346	332	316	350	332	
40	313	314	280	C	291	277	Ü	295	327	304	326	326	297	300	312	310	317	321	305	
30	281	282	271	270	263	251	0	288	0	306	304	305	282	283	259	301	285	315	286	
20	279	272	276	0	261	266	0	251	0	285	272	0	269	274	261	287	29 0	278	273	
10	267	271	257	270	260	0	255	245	242	G	257	254	260	264	265	267	269	268	259	
O	260	252	246	253	246	240	242	244	227	234	234	233	248	248	236	241	257	257	245	

TOTAL OZONE JULY 1972



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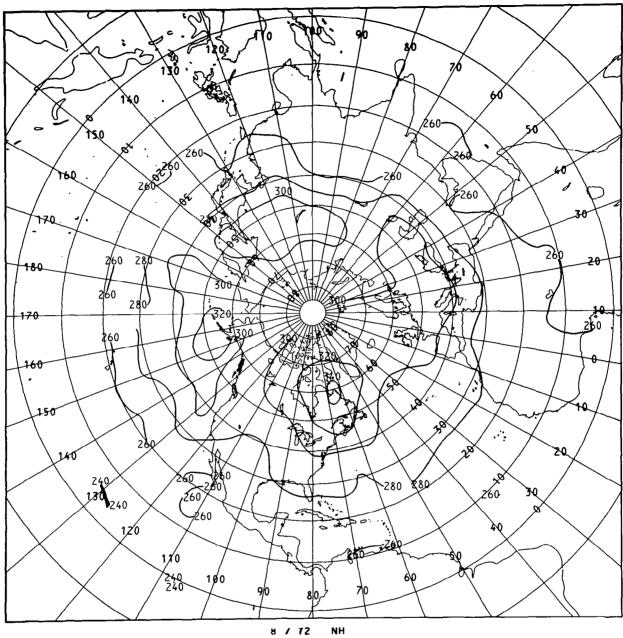
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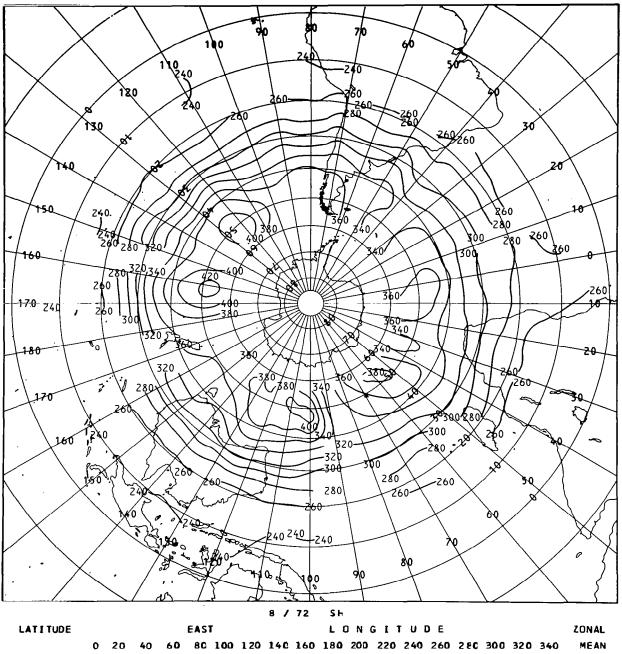
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TOTAL OZONE AUGUST 1972



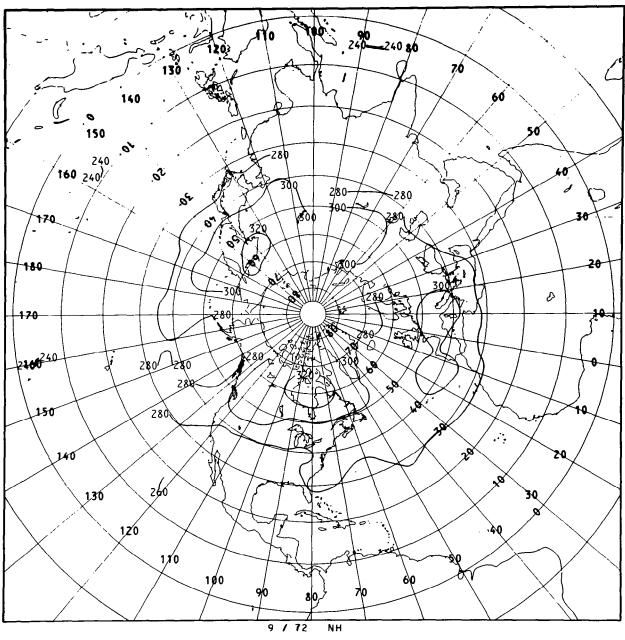
LATITUDE					EAST	Г				L	3 N C	G I 1	rui) E					ZGNAL
	0	20	40	60	80	160	120	140	160	186	200	220	240	260	260	300	32 Û	340	MEAN
80	301	299	296	308	283	257	299	288	291	251	29ú	28u	273	301	265	30C	30 5	312	296
70	324	29 0	278	303	281	271	297	248	0	316	288	287	274	288	342	316	310	314	301
60	30 7	293	302	0	290	0	9	C	289	0	323	283	254	346	315	344	33¢	302	308
50	310	311	G	310	286	292	310	302	284	33G	332	295	0	290	319	351	288	L	307
40	287	310	288	0	252	255	257	263	Û	288	36.5	294	286	278	258	319	0	297	288
30	277	283	259	264	253	243	264	267	274	274	277	263	0	269	275	284	284	U	273
20	270	o	262	267	254	255	263	C	267	259	250	256	263	268	278	O	272	261	261
10	273	259	254	259	ō	G	ð	0	Ü	246	9	256	244	Q	260	263	262	259	254
0	266	255	250	243	0	239	237	0	o	Ü	239	245	0	0	243	246	253	253	244

TOTAL OZONE AUGUST 1972



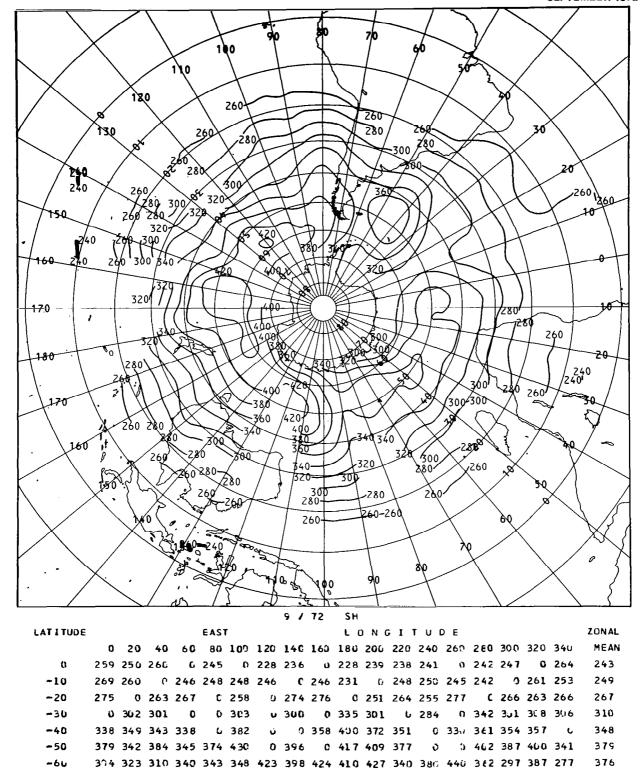
0 0 239 237 0 0 0 239 245 0 243 246 253 253 260 255 250 243 244 0 244 237 246 239 243 230 229 -10 262 255 247 0 240 0 239 231 0 246 242 -20 0 262 273 265 269 0 252 255 259 247 0 248 253 270 251 259 261 257 260 289 292 318 296 0 298 320 329 265 0 347 310 302 296 252 299 280 305 -30 -40 0 332 380 389 327 375 362 395 385 406 335 352 350 353 322 333 363 0 343 -50 391 368 325 368 0 403 327 369 422 362 358 370 322 352 372 -60 289 352 314 381 402 0 356 402 405 365 G 355 -70 335 334 338 0 317 361 0 364 311 303 0 0 0 325 -80 0 0 0 0 0

TOTAL OZONE SEPTEMBER 1972



LATITUDE					EAST	T				L) N C	3 1 .	T U 1	ЭЕ					ZONAL
	С	20	40	60	80	100	120	146	160	180	200	22J	240	260	280	300	320	340	MEAN
80	288	256	O	265	Ċ	275	C	Ü	0	0	2 69	Ü	277	286	286	289	249	268	275
70	295	267	279	296	285	323	306	323	O	258	Ú	C	306	0	324	295	33C	277	297
60	276	284	282	297	0	329	317	328	0	O	0	267	314	319	347	317	262	298	307
50	O	287	291	300	311	272	331	319	C	307	269	262	327	317	287	285	Ü	279	299
40	284	293	264	G	0	Э	282	0	3ü8	257	279	282	G	278	271	281	294	Ġ	284
30	280	271	269	0	259	0	274	242	0	266	263	O	259	262	2 € 4	276	٥	282	271
20	266	264	C	267	254	C	258	0	257	264	Ü	Q	268	258	255	0	267	269	261
10	253	0	261	257	O	0	231	248	242	0	251	0	259	259	O	263	2 6 3	268	253
n	259	250	260	0	245	0	228	236	Ü	228	239	238	241	i)	242	247	e	264	243

TOTAL OZONE SEPTEMBER 1972



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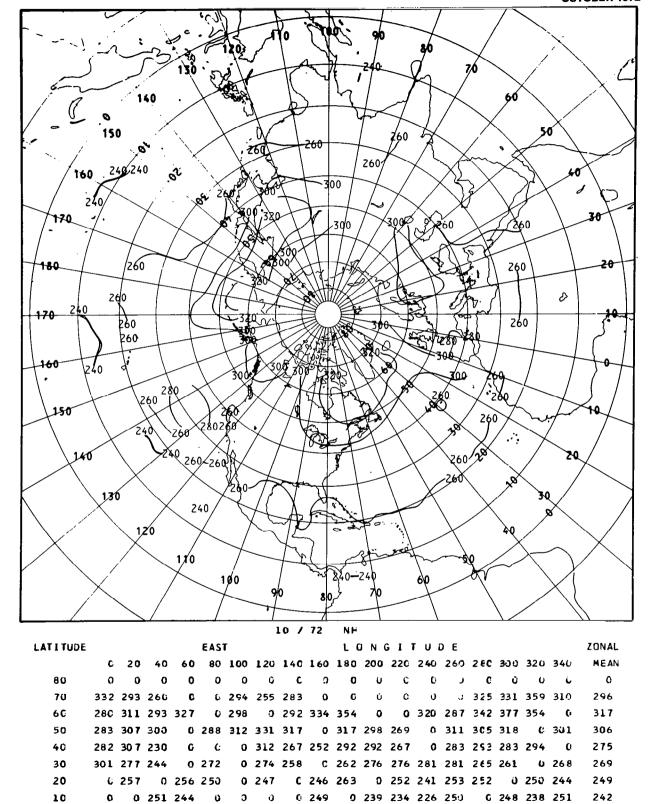
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0 319

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TOTAL OZONE OCTOBER 1972



0 242 240

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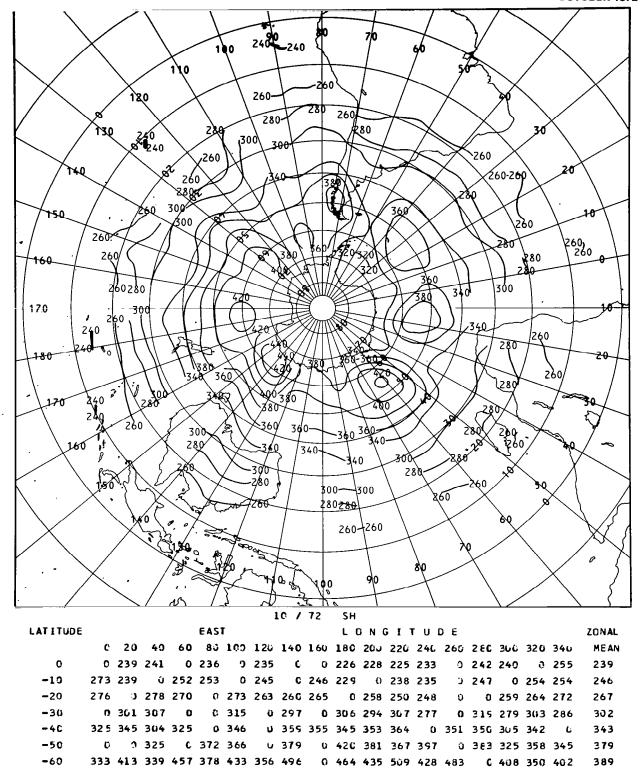
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TOTAL OZONE OCTOBER 1972



0 273 344

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0 438 437 351 279 326 347 270 248

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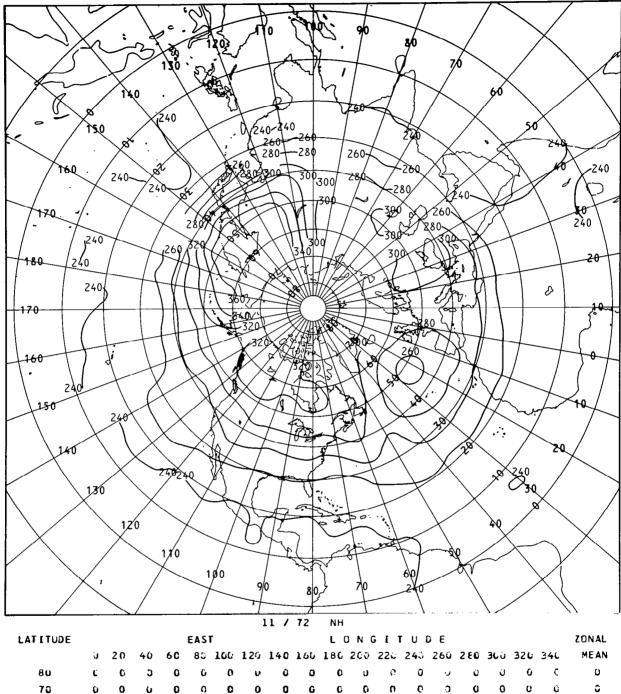
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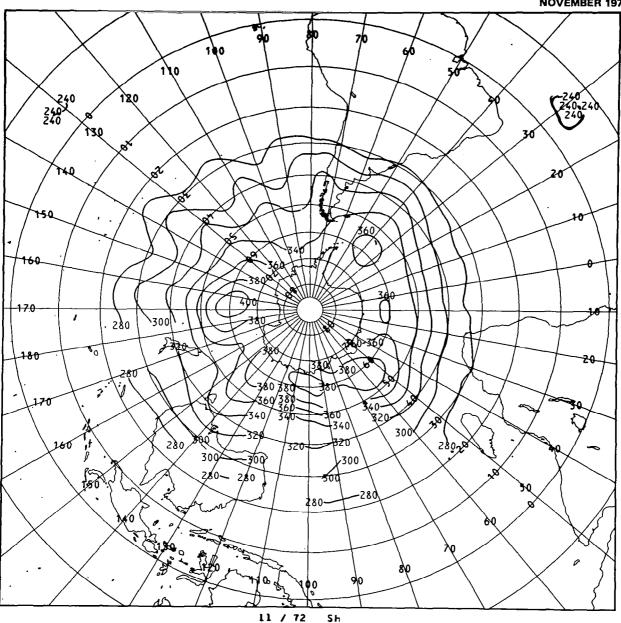
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TOTAL OZONE NOVEMBER 1972



328 274,299 0 290 G 305 380 375 415 386 344 334 318 60 0 276 344 412 393 330 318 0 332 370 284 267 317 50 267 282 286 298 0 312 271 0 298 262 287 288 290 40 284 280 312 0 296 280 298 320 30 264 257 274 Ú 255 257 0 262 263 255 262 254 0 235 0 249 253 u 237 231 233 232 0 247 246 239 26 0 226 0 239 240 259 235 10 0 239 0 232 241 236 0 230 0 228 236 Û 0 242 238 0 234 0 236 233 229 233 232 241 229 234 234 246 G 245 236

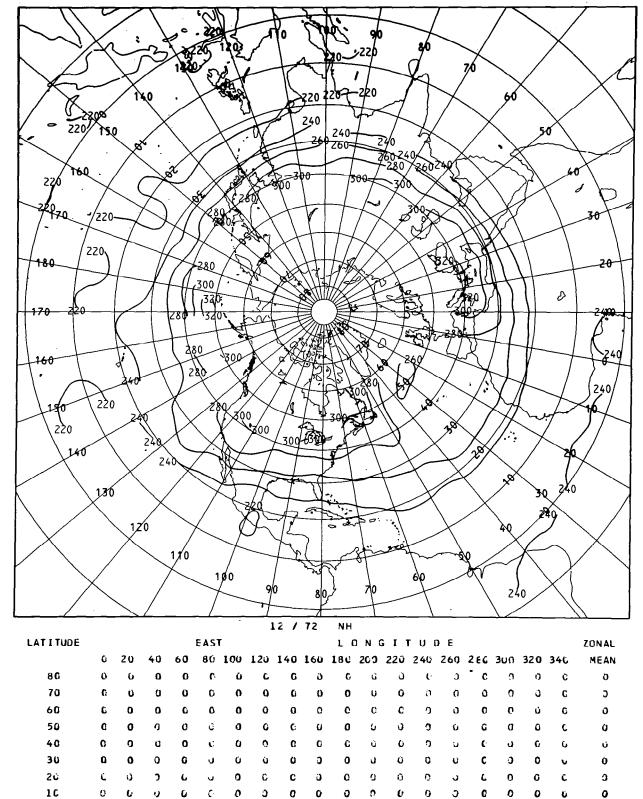
TOTAL OZONE NOVEMBER 1972



LATITUDE EAST LONGITUDE ZONAL 20 80 100 120 140 160 180 200 220 240 260 260 300 320 340 MEAN U 0 242 238 C 236 233 229 233 232 241 229 234 234 246 0 245 236 -10 2 245 245 0 251 239 237 241 239 249 240 241 242 252 244 -20 0 256 270 269 0 257 275 0 262 263 0 256 252 263 263 -3G 0 284 292 0 304 288 308 294 6 305 334 G 282 279 293 319 306 296 308 -40 0 314 310 0 328 U 329 368 0 307 336 342 323 322 -50 U 303 374 C 303 0 383 308 363 375 418 338 0 348 367 391 368 353 -60 0 427 409 383 455 0 422 386 406 448 401 436 420 305 371 383 345 394 - 70 397 419 316 423 348 **0** 388 0 390 347 451 375 380 436 395 401 436 405 389 -80 367 347 337 322 0 344 333 383 431 391 331 365 373 357 355 0 359 366 355

TOTAL OZONE DECEMBER 1972

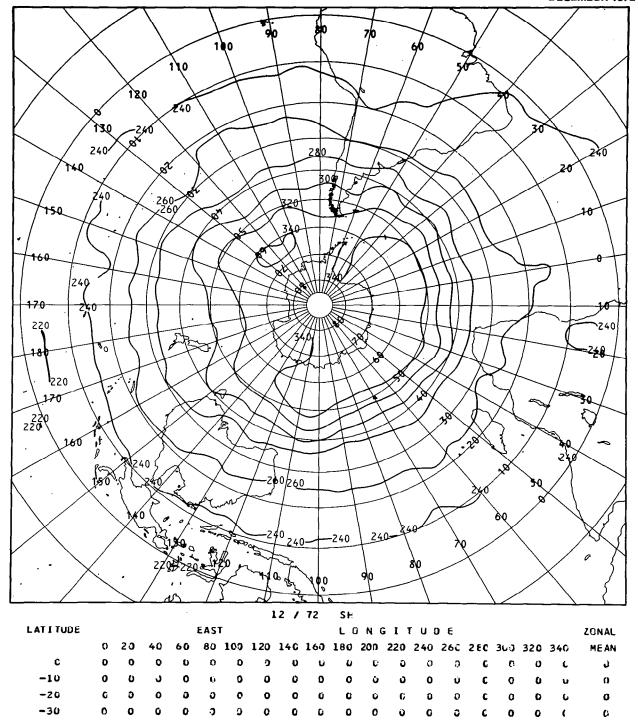
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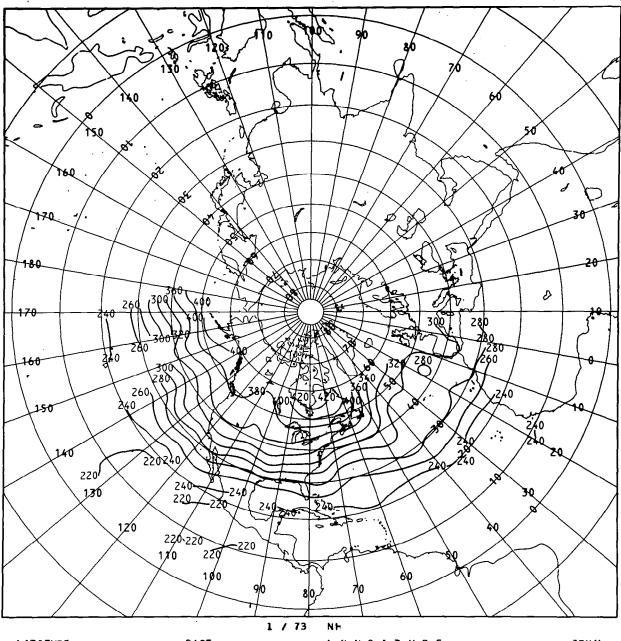
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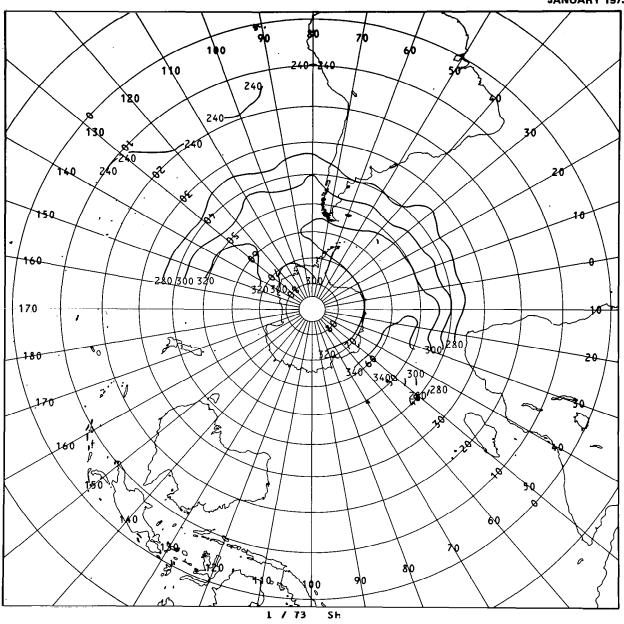
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TOTAL OZONE JANUARY 1973



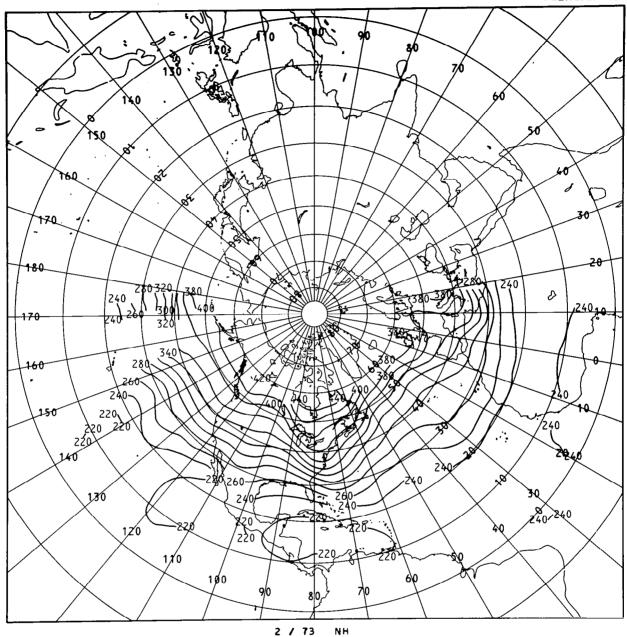
				EAS	Ţ				L (אנ	G I .	t U 1) E					ZONAL
0	20	40	60	80	100	120	140	160	180	200	220	240	260	2 80	3(J	320	34u	MEAN
0	Q	٥	0	o	٥	٥	o	G	0	C	0	С	Ü	6	n	O	Ĺ	G
0	0	0	G	0	0	Э	G	ບ	C	Ü	C	0	G	c	ز	0	G	o
Ú	c	0	0	၁	0	0	C	υ	0	461	٥	G	390	469	399	338	O	397
298	322	C	0	3	0	0	e	0	406	O	352	393	373	341	3U 4	0	250	358
285	319	0	0	Ü	C	0	0	٥	354	277	309	372	0	358	308	254	0	327
297	0	0	0	٥	0	o	0	0	0	256	258	276	275	255	250	313	283	272
236	0	Ö	0	٥	0	0	C	0	C	230	240	256	0	2 20	238	0	223	228
0	0	0	0	Ü	0	0	C	0	0	229	224	214	221	223	230	233	235	225
253	0	0	0	0	0	0	0	G	0	228	229	228	237	234	240	237	244	234
	0 0 0 298 285 297 236	0 0 0 0 0 0 298 322 285 319 297 0 236 0	0 0 0 0 0 0 0 0 0 298 322 C 285 319 0 297 0 0 236 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 20 40 60 80 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 298 322 C 0 0 285 319 0 0 0 297 0 0 0 0 236 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 20 40 60 80 100 120 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 20 40 60 80 100 120 140 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 20 40 60 80 100 120 140 160 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 20 40 60 80 100 120 140 160 180 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 20 40 60 80 100 120 140 160 180 200 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 20 40 60 80 100 120 140 160 180 200 220 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 20 40 60 80 100 120 140 160 180 200 220 240 0 0 0 0 0 0 0 0 0 0 0 0 0	0 20 40 60 80 100 120 140 160 180 200 220 240 260 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 3CJ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 3CJ 320 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 3CJ 320 340 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

TOTAL OZONE JANUARY 1973



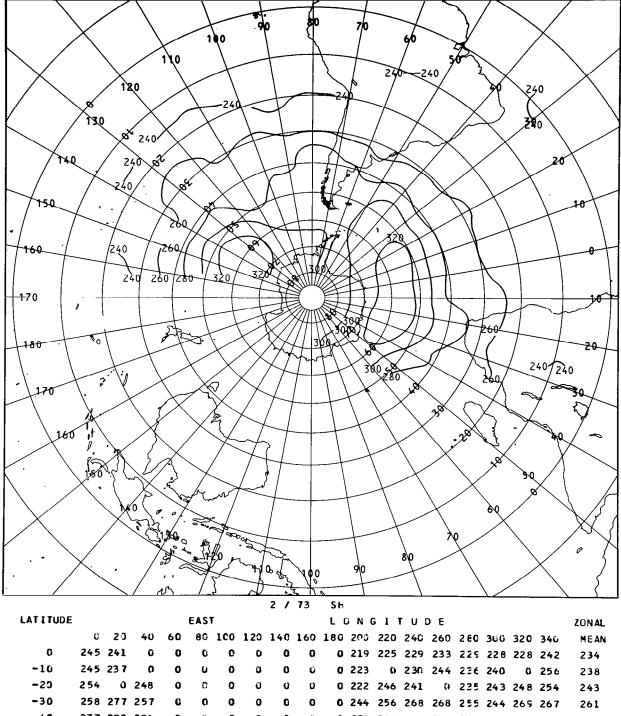
LATITUDE					EAST	Г				L	ואכ	GI	r u i	DE					ZONAL
	C	20	40	6C	80	100	120	140	160	180	200	220	240	26)	2 8 0	300	320	34 <i>6</i>	MEAN
0	253	0	C	0	î	0	3	C	Ú	Ċ	228	229	228	237	234	240	237	244	234
-10	250	0	229	0	0	0	O	C	0	C	234	O	235	243	235	O	250	253	239
-2C	244	242	245	0	C	0	0	0	٥	C	245	0	238	238	250	230	250	265	245
-30	258	256	257	Q	0	0	0	0	9	6	258	274	276	255	252	250	271	268	261
-40	273	286	0	0	۵	0	0	G	0	ù	0	281	292	286	289	264	0	264	288
-50	291	292	0	0	Э	O	Ü	G	0	O	Ü	327	298	G	365	293	30 2	C	317
-60	323	345	0	350	O	0	Э	0	O	G	າ	347	341	341	317	342	338	342	334
- 70	326	329	329	C s	O	O	a	Ġ	0	C	Ú	0	279	299	316	30.2	326	30 9	316
-80	300	299	306	311	328	307	297	C .	0	0	O	Ü	0	286	253	295	290	301	301

TOTAL OZONE FEBRUARY 1973

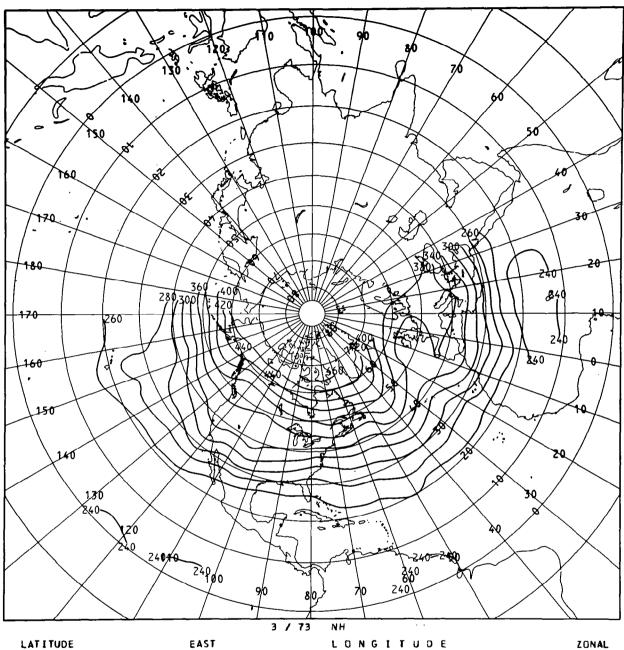


ZONAL LONGITUDE EAST LATITUDE 80 100 120 140 160 180 200 220 240 260 260 300 320 340 MEAN C 20 40 60 9 0 C G 80 G C 0 70 437 393 397 516 510 395 412 430 6ũ 322 0 459 395 369 311 374 0 50 347 322 309 357 344 371 313 281 288 334 335 319 40 0 290 279 257 250 250 270 273 30 283 266 0 230 232 214 246 216 245 232 226 226 C 227 225 20 0 218 221 211 222 221 224 233 224 10 245 233 C 219 225 229 233 229 228 228 242 234 0 0 245 241 O

TOTAL OZONE FEBRUARY 1973

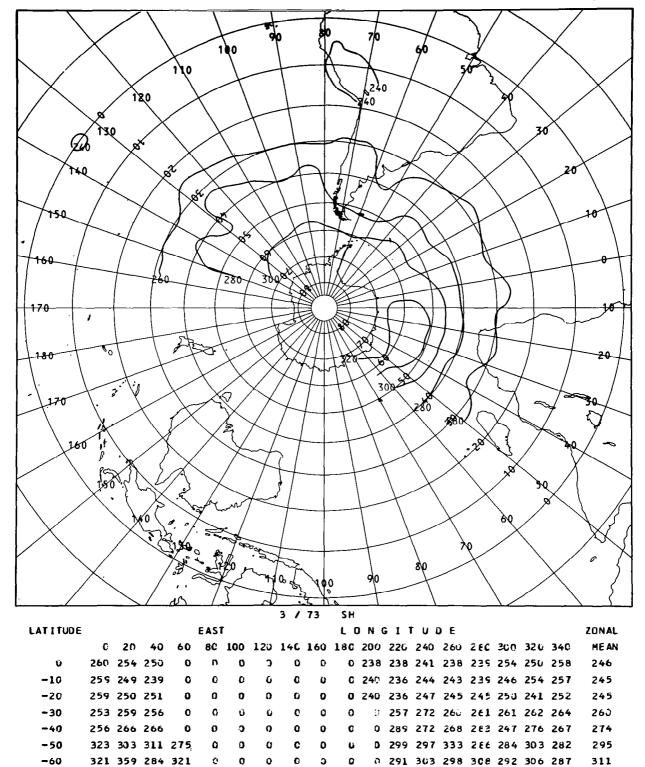


TOTAL OZONE MARCH 1973



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LATITUDE					EAS	T				L	ואכ	3 I	T U :	DΕ					ZONAL
	c	23	40	60	80	100	120	146	160	180	200	220	240	260	2 6 0	3U C	320	34í	MEAN
8 û	e	G	0	G	e	Ü	J	O	0	U	a	o	c	0	C	U	Ō	U	490
70	413	o	o	O	Ü	O	o	G	C	G	447	O	485	504	527	470	469	41 C	455
60	368	362	0	0	O	0	O	O	O	Q	435	433	0	416	338	338	415	314	407
50	366	338	O	0	c	0	ù	0	Q	387	328	371	357	364	366	359	419	348	372
40	369	356	0	0	n	C	ð	C	J	C	307	326	351	346	328	330	378	32C	336
30	323	282	e.	0	G	Ü	O	C	(·	ί	281	294	336	36 7	257	285	280	29 u	288
20	234	229	229	0	O	0	O	C	C	0	248	256	256	229	240	265	223	248	246
10	254	251	235	0	0	0	G	Û	э	0	232	228	231	226	235	235	243	254	240
U	260	254	250	0	O	0	0	0	o	0	238	238	241	238	235	254	250	258	246

TOTAL OZONE MARCH 1973



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319 317 298 299 323

304 302 299 316 315 296

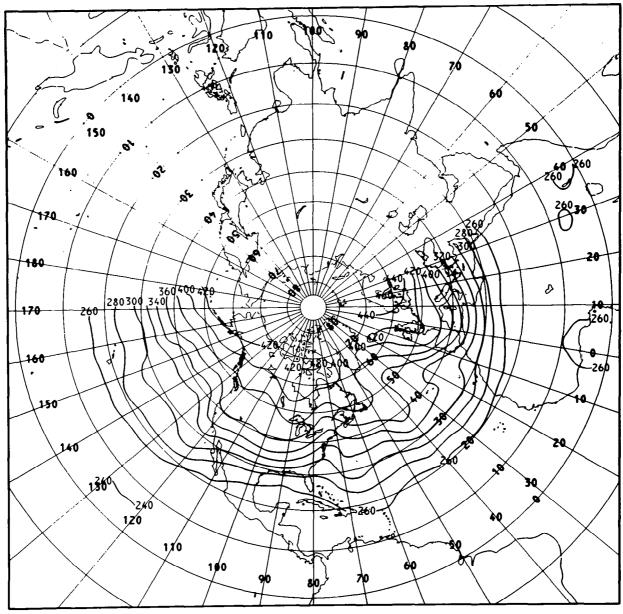
31U

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U 310 326 321 3C4 306 339

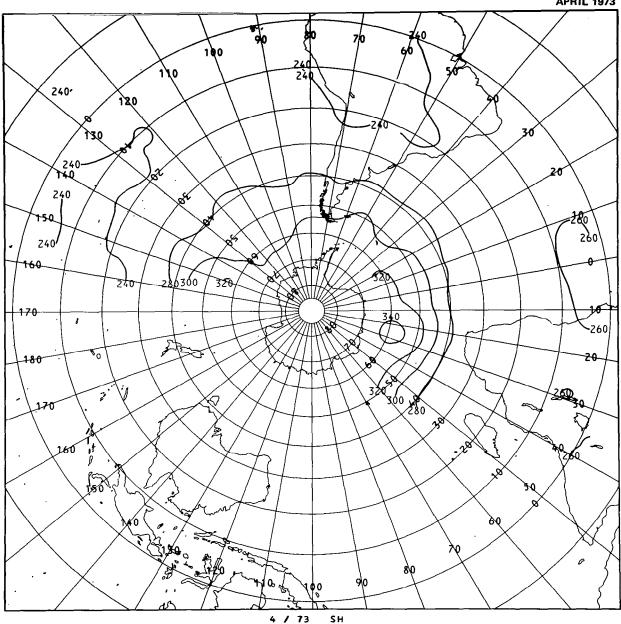
0 308 305 312 316 293

TOTAL OZONE APRIL 1973

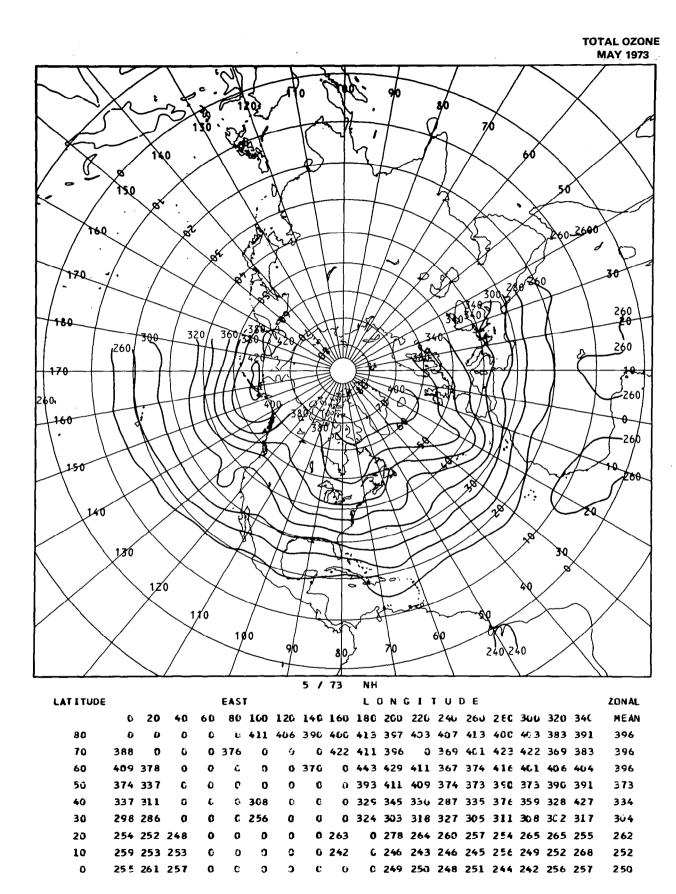


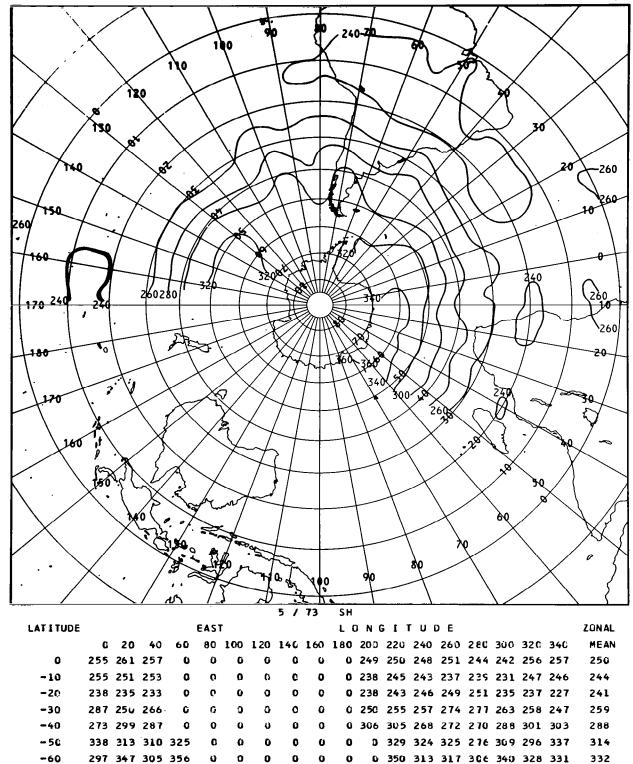
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LATITUDE					EAS	r				L) N C	GII	ГО	DE					ZONAL
	0	20	40	60	80	100	120	140	160	180	260	223	240	269	280	300	320	34 ü	MEAN
80	C	ø	٥	0	0	0	Ü	40.7	416	432	393	466	423	428	441	442	395	398	420
70	450	ũ	0	0	0	Ú	9	0	C	n	425	Ũ	447	435	436	392	443	390	427
60	403	488	0	c	Ü	0	0	С	Ü	0	436	420	364	399	C	441	344	418	41 ù
50	448	401	0	0	ວ	0	0	0	0	415	355	348	395	333	295	393	368	324	392
40	402	35 7	e	C	Ĉ	0	ა	C	0	457	383	349	435	410	327	353	460	345	355
30	308	283	0	0	e	0	c	0	G	0	277	0	334	304	273	30 1	278	356	297
20	245	237	248	C	o	0	0	0	٥	G	275	278	257	243	245	268	264	257	255
10	269	256	255	G	ü	C	Ú	c	0	Ü	Ĵ	239	233	240	250	242	238	254	245
0	258	254	255	0	O	0	۵	C	0	0	245	241	244	243	241	239	Ç	248	249

TOTAL OZONE APRIL 1973



								4 /	13	SH										
LATITUDE					EAST	Г				Lí	3 N 6	G I	TU	ΟE					ZONAL	
	O	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	MEAN	
0	258	254	255	0	U	0	0	0	Û	0	245	241	244	243	241	239	4)	248	249	
-10	261	253	247	0	0	0	υ	0	0	0	241	228	238	246	236	226	247	255	244	
-20	252	246	245	C	C	O	0	G	D	0	226	247	245	240	249	235	241	245	242	
-30	254	255	263	0	0	0	0	0	Ü	0	269	268	265	263	263	263	256	266	258	
-40	284	294	288	C	0	0	o	Ü	0	0	0	280	298	Ü	304	298	269	276	282	
- 50	272	341	306	315	0	0	0	0	0	0	Ú	283	277	290	291	297	297	324	299	
-60	339	344	338	312	C	0	O	a	C	O	3	309	318	315	325	318	327	293	321	
-70	316	322	331	315	333	0	0	C	Ü	0	٥	0	272	329	314	263	317	305	312	
-80	0	0	0	C	C	0	o	C	e	٥	Ú	C	0	Q	ć	Ü	O	Ú	C	





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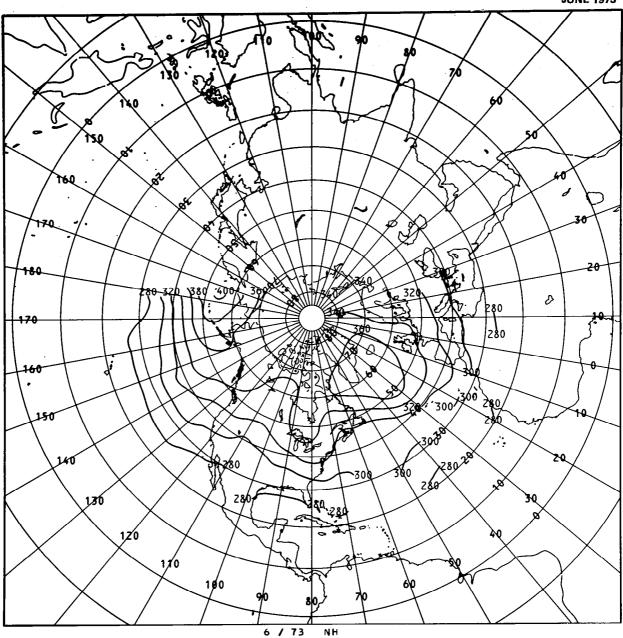
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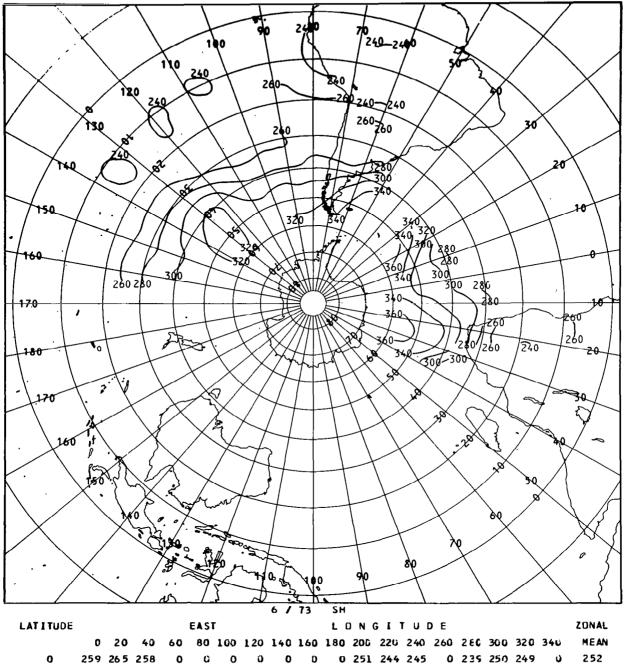
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TOTAL OZONE JUNE 1973



								- •											
LATITUDE					EAS	Ţ				L) N (G I	TU	D E					ZONAL
	0	20	40	6 Ü	38	100	120	140	160	180	266	220	240	260	2 E G	300	320	340	ME AN
80	0	336	338	C	C	o	364	351	345	338	333	351	364	356	35G	352	355	352	352
70	335	0	0	C	383	0	٥	O	361	375	360	378	344	329	356	213	355	366	353
60	332	318	٥	352	e	0	۵	0	٥	C	362	384	n	336	355	356	C	358	361
50	337	0	0	0	0	o	U	C	0	408	363	369	355	349	358	ð	398	384	348
40	320	289	O	0	0	276	υ	O	0	319	303	355	325	3C 1	335	315	C	c	309
30	C	288	0	C	0	250	Ü	C	0	283	282	285	289	283	Ğ	342	296	291	285
20	Ü	0	0	0	254	0	G	0	Ģ	0	272	281	263	284	C	C	269	278	267
10	268	243	263	0	260	٥	Ú	0	O	0	254	241	253	U	257	243	258	0	255
0	259	265	258	0	C	ō	0	0	υ	C	251	244	245	o	239	250	249	U	252

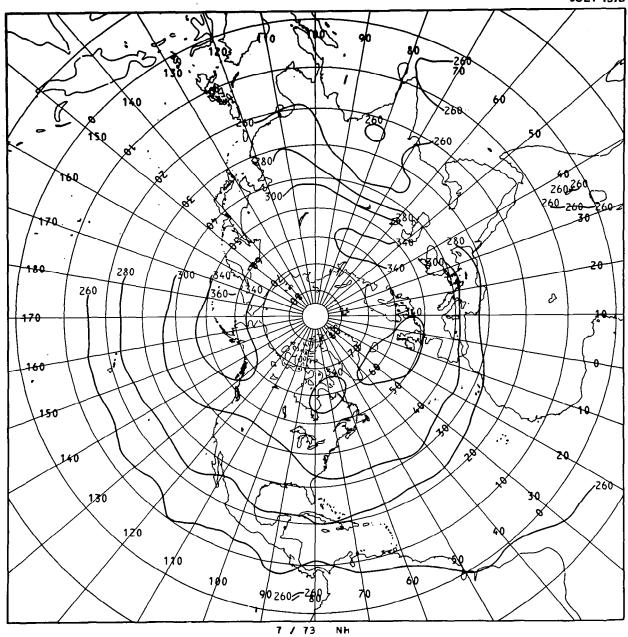
TOTAL OZONE JUNE 1973



LATITUDE					EAS	Г				L) N (3 I 1	r u i	E					ZONAL
	0	20	40	60	80	160	120	140	160	180	200	220	240	260	286	300	320	340	MEAN
0	259	26 5	258	0	O	0	o	0	ø	0	251	244	245	0	235	250	249	Ú	252
-10	256	0	o	0	0	0	0	G	Ü	0	242	245	238	240	240	0	233	256	242
-20	0	241	0	0	0	0	0	C	0	0	242	250	242	260	256	249	Ç	239	247
-30	O	262	261	G	O	0	278	0	0	0	270	275	251	253	270	275	0	G	266
-46	296	0	287	0	C	0	317	C	0	0	342	315	346	319	279	9	343	313	304
-50	315	36 O	353	0	U	346	Ü	0	o	0	٥	291	320	307	2 & 7	360	0	C	327
-60	345	347	0	0	O	0	Ü	C	O	C	0	310	269	300	255	410	317	387	332
-70	C	O	٥	0	0	ð	0	0	C	٥	υ	0	0	0	C	0	0	0	0
-86	O	0	Ū	0	0	0	o	0	0	C	C	G	0	0	0	O	G	0	0

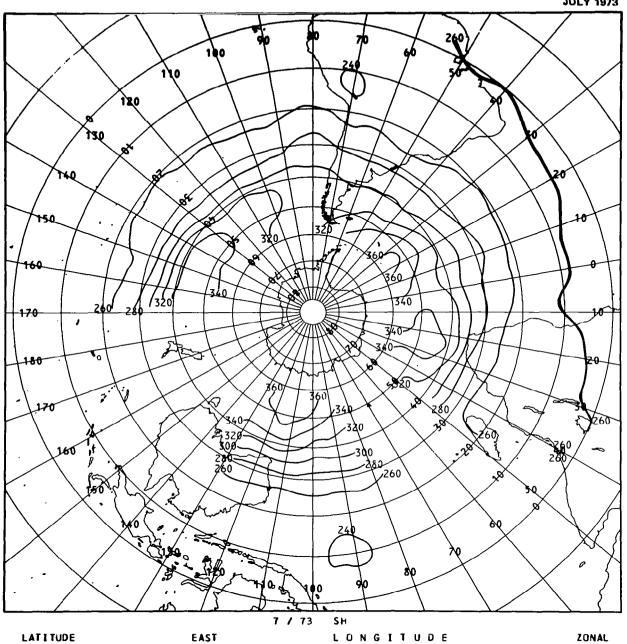
N.

TOTAL OZONE JULY 1973



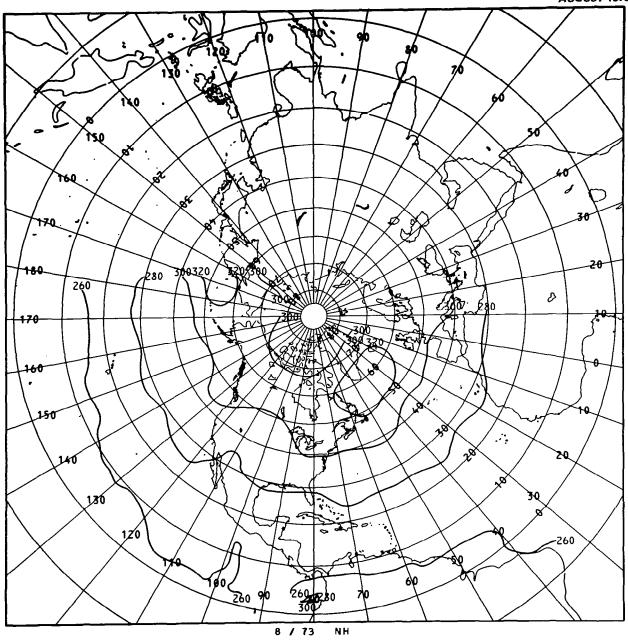
LATITUDE					EAS	Г				L) N (G I 1	rui	DE					ZONAL	
	0	20	40	6 C	80	100	123	14C	160	180	200	220	246	269	2 € 6	300	32 C	340	MEAN	
80	341	338	341	324	٥	305	315	313	323	323	326	337	331	336	327	33 7	330	341	326	
70	332	0	308	327	338	0	c	C	٥	315	322	υ	321	330	33¢	344	327	340	331	
60	336	339	O	344	352	313	0	G	0	374	341	366	C	327	332	342	350	356	342	
50	351	33 2	0	328	322	328	o	ø	0	370	359	346	329	323	351	329	3ü 4	343	336	
40	303	311	٥	272	265	291	269	C	э	308	308	304	296	292	362	316	31C	308	297	
30	276	275	o	C	258	264	261	C	0	290	295	280	293	287	256	290	301	283	281	
20	272	270	261	С	259	253	0	0	o	258	270	268	280	272	277	277	271	27L	268	
10	272	260	256	O	255	248	249	0	0	0	255	248	257	260	251	265	271	269	259	
c	270	267	262	٥	259	250	246	O	ø	0	250	250	251	251	252	253	260	265	255 ،	

TOTAL OZONE JULY 1973



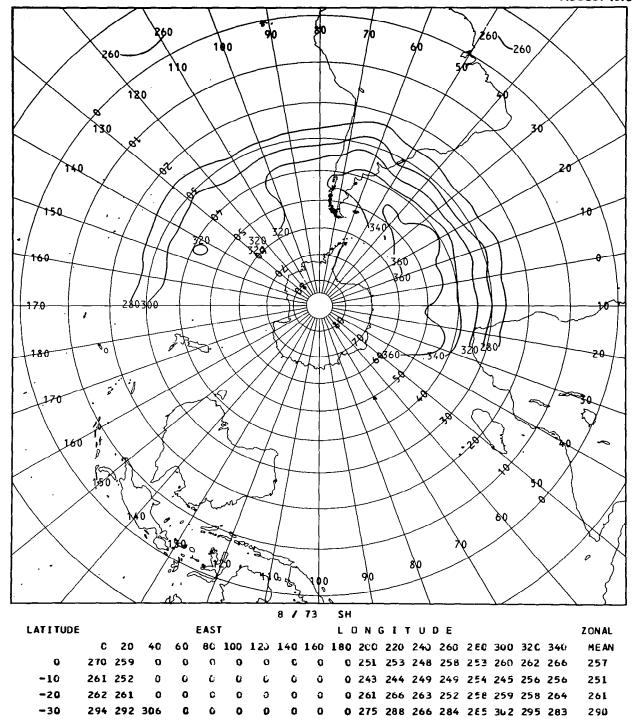
										91.									
LATITUDE					EAS	T				L) N (3 I I	1 0 1	DΕ					ZONAL
	Ű	20	40	60	80	100	120	140	160	180	200	220	240	260	2 E C	300	320	340	MEAN
0	270	267	262	0	259	250	246	C	o	0	25ú	25J	251	251	252	253	260	265	255
-10	256	252	257	0	243	243	235	0	0	0	239	246	244	244	247	240	250	252	245
-20	255	248	252	0	260	257	242	C	0	C	253	257	253	253	265	252	257	255	252
-30	285	274	262	0	266	268	278	ű	Q	G	289	267	276	263	251	296	270	299	273
-40	316	347	350	0	296	316	319	C	O	0	364	290	294	333	322	290	342	30 2	316
-50	317	333	304	0	0	343	386	0	Ü	C	365	337	287	317	313	296	Ü	39L	337
-60	0	0	0	356	0	0	341	G	n	0	υ	319	394	316	278	353	341	35 0	343
-70	٥	0	0	0	0	Ú	0	0	õ	C	C	C	0	0	G	o	0	C	U
-80	C	٥	0	0	0	0	0	0	0	C	C	0	0	Ċ	0	0	U	0	0

TOTAL OZONE AUGUST 1973



LATITUDE					EAST	г				L) N (3 I 7	r u) E					ZONAL	
	0	20	40	60	80	100	120	140	1 60	180	200	220	240	260	280	300	32 U	346	MEAN	
80	0	0	0	0	0	280	283	287	300	258	296	296	290	309	253	302	251	C	288	
76	302	0	C	0	0	0	0	٥	0	306	294	0	298	300	255	3u 2	306	333	301	
60	0	C	C	e	0	0	0	0	C	339	322	307	322	3¢ 2	322	342	338	309	318	
50	304	0	3	0	0	٥	3	C	0	342	257	290	340	299	33C	328	379	338	310	
40	289	301	0	0	0	C	0	O	0	284	292	296	285	297	302	304	289	287	294	
30	279	267	0	C	0	0	0	0	o	280	279	276	283	288	2 E C	282	290	285	282	
20	263	0	0	G	0	0	0	0	O	273	269	265	275	260	271	268	276	271	268	
10	267	0	C	C	o	0	0	C	0	G	250	254	261	252	265	262	272	265	262	
0	270	259	0	C	J	0	0	0	υ	0	251	253	248	258	253	260	262	266	257	

TOTAL OZONE AUGUST 1973



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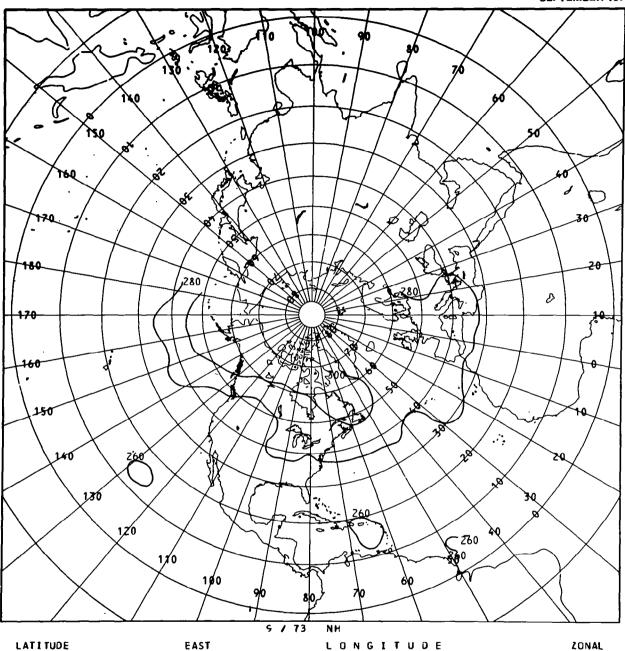
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0 320 360 305 351 338 367 354 390

0 300 291 311 301 315 332 337 374

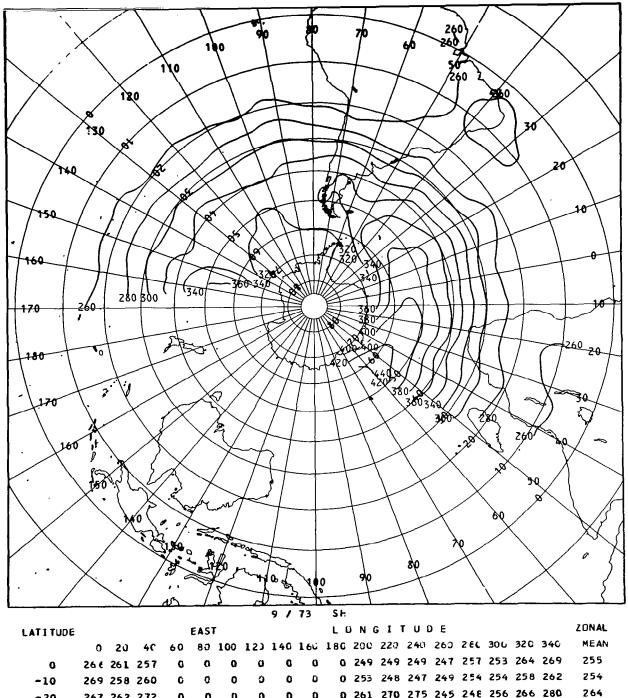
0 300 312 329 360 347 338 365

TOTAL OZONE SEPTEMBER 1973



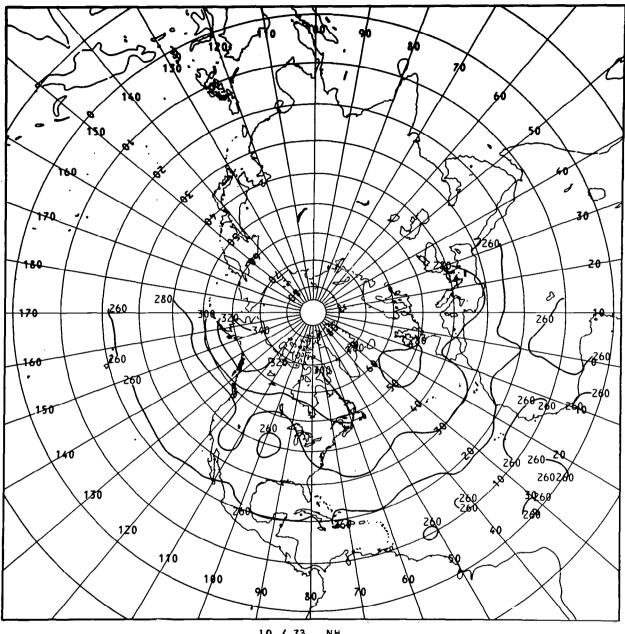
LAT I TUDE					E AS1	Г				L	ואכ	GI	T U	DE					ZONAL
	C	20	40	60	80	100	120	14¢	160	186	20 ს	220	240	260	260	300	32 U	34C	MEAN
80	0	0	0	9	O	ø	0	311	323	325	313	328	327	315	309	27G	268	285	308
70	279	0	Ð	0	O	0	Ú	O	C	328	336	346	310	308	284	299	276	289	305
60	285	282	C	0	c	O	L	0	Ü	341	33L	338	313	316	309	324	287	331	306
50	290	268	0	0	0	0	Ü	Ú	0	304	299	262	284	28ü	303	341	278	293	290
40	294	292	O	0	0	0	O	0	0	266	273	276	276	277	280	277	278	286	283
30	275	262	a	0	C	0	ΰ	0	ŋ	265	264	269	267	274	268	279	270	278	271
20	262	256	J	ō	0	0	3	C	Э	0	259	259	260	258	262	264	262	266	260
10	263	256	254	0	0	0	0	O.	0	0	247	253	254	255	262	261	268	260	257
G	26 €	261	257	0	c	0	Ü	C	Ø	0	249	249	249	247	257	253	264	269	255

TOTAL OZONE SEPTEMBER 1973

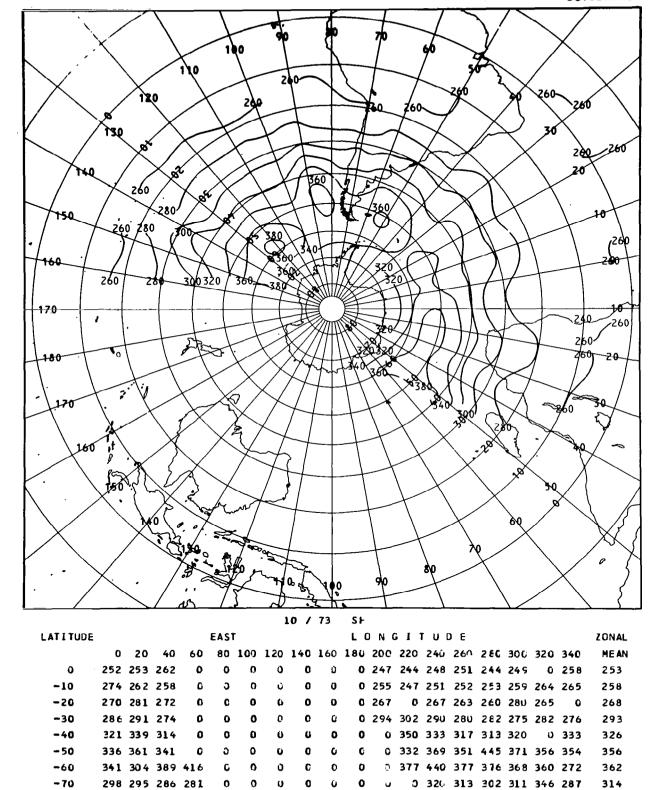


LATITUDE					EAST	r				L) N (; I 1	ו ט נ) E					ZONAL
	0	20	40	60	80	100	12)	140	160	186	200	220	240	260	266	30 U	32 C	340	MEAN
O	26 €	261	257	G	a	0	a	G	0	O	249	249	249	247	257	253	264	269	255
-10	269	258	260	C	0	0	o	0	٥	0	253	248	247	249	254	254	258	262	254
-20	267	262	272	0	0	0	0	0	D	0	261	270	275	245	248	256	266	280	264
-30	290	293	307	a	Ü	0	0	O	0	Ü	302	292	286	291	256	308	280	321	296
-40	352	370	388	٥	G	0	Ü	0	٥	O	320	306	364	311	318	314	374	353	341
-50	369	393	383	O	0	٥	U	C	Ü	9	O	310	318	338	3 E C	337	354	367	363
-60	395	375	441	455	c	0	0	C	0	0	0	356	410	311	260	32 7	339	348	371
-70	340	368	363	329	Ü	0	ø	O	Ü	0	э	261	274	361	276	292	326	316	313
-80	0	o	0	0	Ģ	0	o	C	e	0	0	Ċ	0	3	C	0	0	Ú	0

TOTAL OZONE OCTOBER 1973



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	Ü	20	40	60	80	100	120	140	160	180	200	220	240	260	2 & C	30 Û	320	340	ME AN
80	Ġ	0	9	Ċ	3	0	ű	C	0	0	Ü	Ü	ن	Ú	C	0	Ü	C	0
70	268	0	0	0	0	0	.)	0	0	0	374	0	332	292	256	310	263	297	306
60	269	320	0	c	ð	0	0	0	0	0	336	332	360	271	311	292	312	295	305
50	285	260	0	0	G	0	Ü	0	G	0	c	271	27C	256	329	31 7	C	267	289
40	293	313	0	0	O	0	0	C	Ú	307	262	265	262	248	288	292	276	294	279
30	259	270	0	C	9	0	٥	0	0	U	268	272	266	280	272	0	281	ø	269
20	260	253	0	0	O	0	Ü	C	0	0	252	247	254	259	255	258	257	261	256
10	266	259	258	0	٥	0	0	0	0	0	241	246	252	251	253	257	263	269	254
0	252	253	262	Ú	0	C	9	C	Ü	0	247	244	248	251	244	249	C	258	253



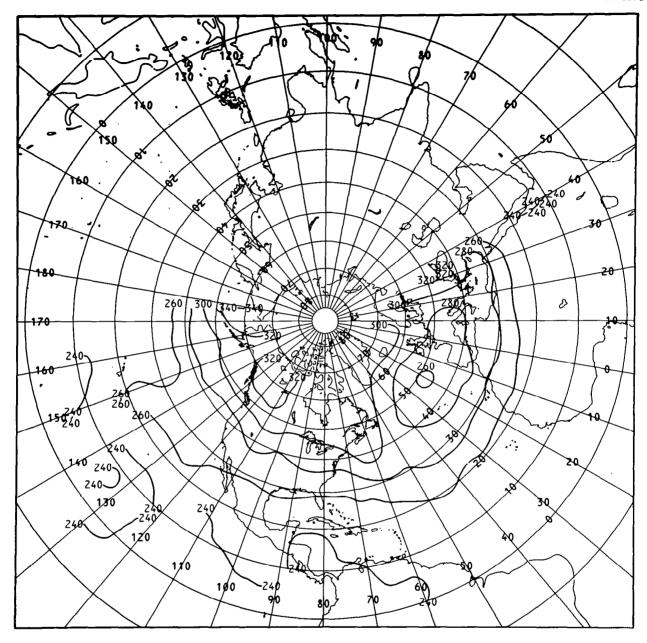
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268 241 262 270 250 285 318

266

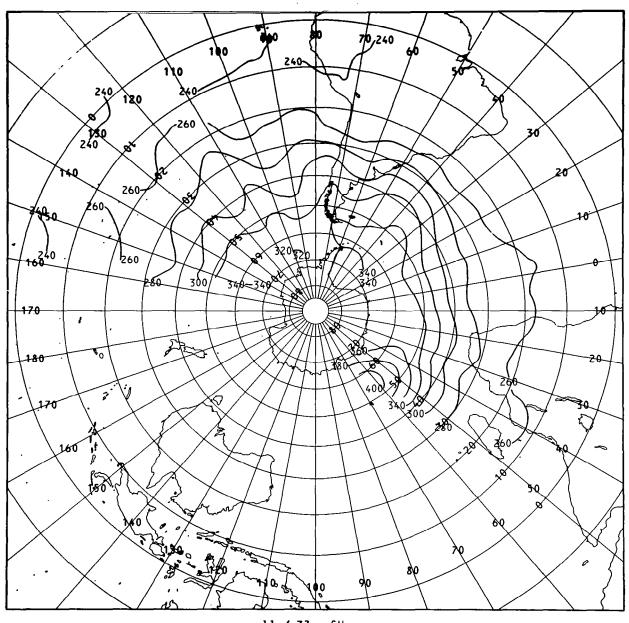
0 285

C 269 272 250



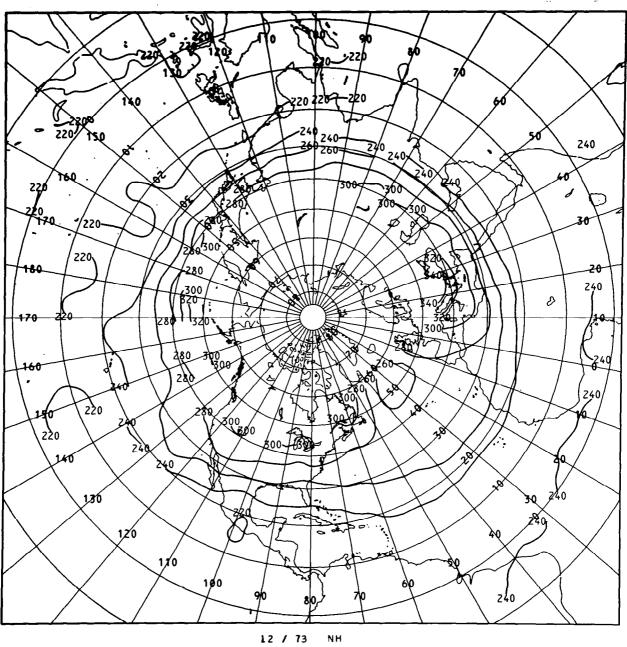
							1	11 /	73	NH									
LATITUDE					EAS	T				L) N C	6 I .	TUI	DE					ZONAL
	Ü	20	40	60	80	100	120	140	160	186	293	220	240	260	2 E C	300	320	34C	MEAN
80	0	0	J	O	0	3	U	0	0	O	U	C	Ü	0	e	J	ι	c	ō
70	9	0	0	0	õ	0	٥	C	0	O	J	0	U	c	C	Q	0	C	อ
60	0	30 <i>0</i>	ü	ü	9	ù	Ü	6	Ü	380	Ü	301	337	307	322	36.7	29 <i>2</i>	298	313
50	283	286	Ü	O	L	o	Ü	0	0	358	288	326	294	290	324	351	281	249	299
40	281	278	0	C	0	O	Ü	c	0	270	287	271	260	275	279	322	294	273	278
30	293	278	Ü	C	C	0	U	0	õ	269	255	280	263	270	257	276	290	286	272
20	253	251	240	0	.u	0	C	c	0	C	245	255	247	245	242	250	259	251	249
10	250	242	236	C	0	,O	0	C	C	0	236	236	238	233	232	242	246	246	242
0	244	242	247	0	.3	o	ō	e	Q	C	240	e	252	235	233	230	252	245	241

TOTAL OZONE NOVEMBER 1973



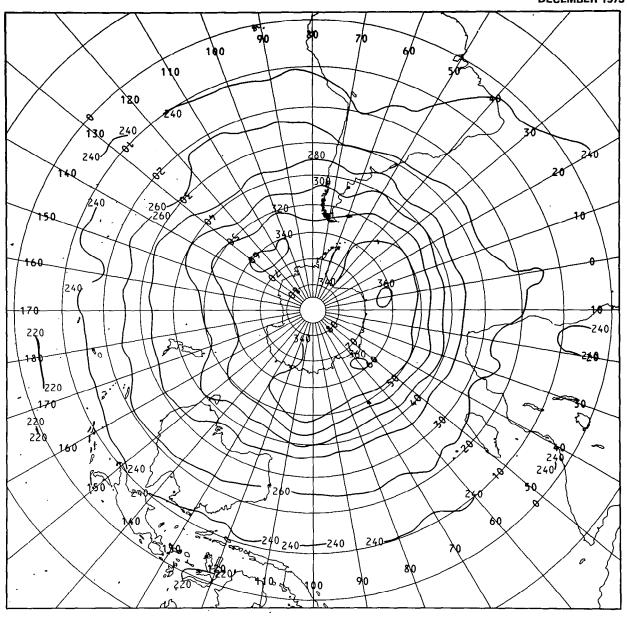
							3	11 /	73	SH									
LATITUDE					EAS!	ſ				L) N (3 I 3	Γυί	E					ZGNAL
	0	26	40	60	80	100	120	146	160	180	200	220	2 4C	260	280	30 ü	320	34C	MEAN
0	244	242	247	0	e	٥	Ĺ	Ü	c	Ü	240	0	252	235	233	230	252	245	241
-10	252	236	256	C	ú	0	Ü	Ú	Ü	0	2 52	256	252	243	243	251	250	254	248
-20	0	25 7	270	Đ	O	0	υ	0	Ú	0	263	268	266	248	254	245	252	259	256
-30	274	273	278	0	Û	o	Ü	0	ú	Ü	302	282	281	268	276	261	293	282	276
-40	284	299	301	0	Ø	C	3	C	0	O	316	280	290	276	328	296	309	287	302
-50	325	347	328	40 4	Ų	0	Ü	G	0	Ū	1ž	321	357	335	314	344	355	333	336
-60	344	35 7	375	415	0	0	J	C	Ð	G	?	368	440	348	336	302	314	354	352
- 7u	329	336	343	371	344	ð	٥	0	O	0	0	340	314	279	331	322	344	345	335
- 8ü	309	322	333	330	363	387	341	0	G	0	0	8	۵	336	326	329	327	387	341

TOTAL OZONE DECEMBER 1973



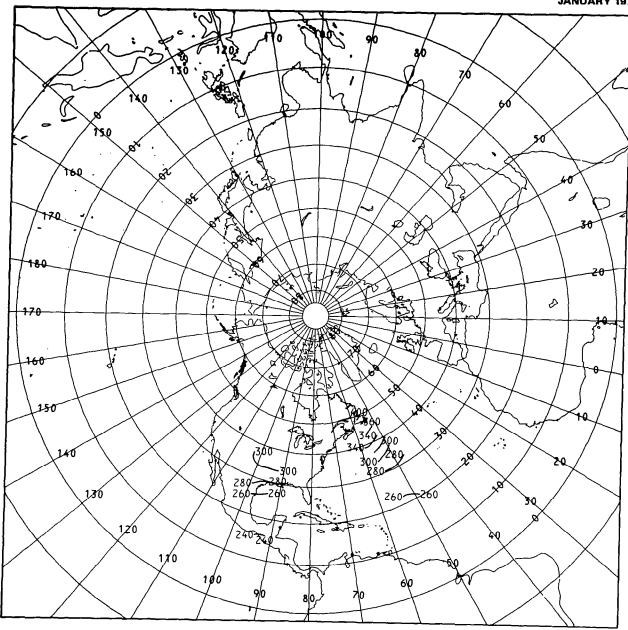
								12 /	13	NH									
LATITUDE					EAST	Г				L) N C	G 1 7	T U I	DE					ZONAL
	U	20	40	60	80	100	120	140	160	186	200	220	240	260	2 8 G	30 0	3 20	34û	MEAN
86	0	0	0	O	Ü	0	0	0	0	Ü	U	υ	¢	Ü	Ü	Ç.	C	Ö	Ų
70	C	U	0	o	G	0	U	G	O	٥	0	Ú	0	0	G	0	O	0	ø
6 G	٥	340	0	0	C	Đ	Ū	С	O	364	ū	Ü	297	0	0	31 C	311	0	309
50	316	0	٥	C	Ü	0	G	C	0	C	0	0	G	c	C	320	26 C	O	296
40	3Q2	363	C	0	O	0	c	0	0	0	G	283	0	ō	a	278	241	290	285
30	301	0	0	Û	٥	0	G	O	0	Û	0	270	0	O	243	235	272	296	274
20	244	v	0	0	Ü	0	0	0	õ	0	249	249	0	0	246	0	248	255	247
10	0	0	233	C	0	0	Ç	c	0	0	232	O	0	O	233	O	U	241	234
0	٥	0	237	C	0	0	0	0	O	C	229	Ü	9	229	0	Ü	2 39	242	237

TOTAL OZONE
DECEMBER 1973



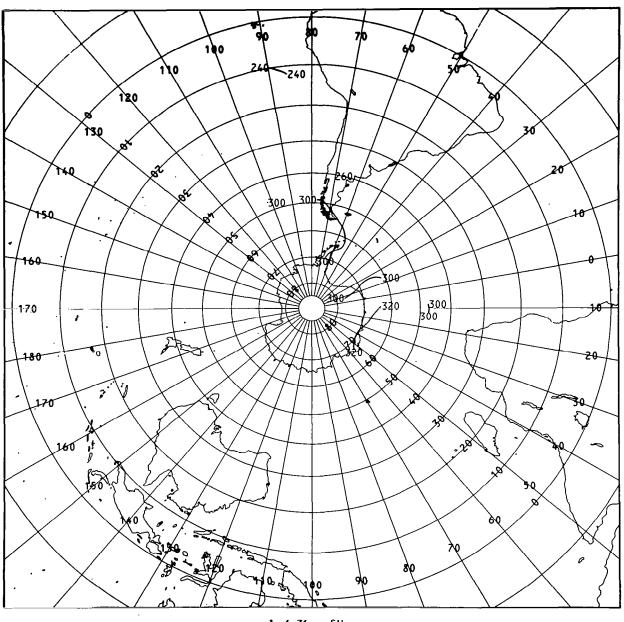
							1	12 /	73	SH									
LAT I TUDE					EAST	F				L) N (3 I '	וטז	DΕ					ZGNAL
	Ú	20	40	60	80	100	12u	140	160	180	200	220	240	260	260	300	320	34C	MEAN
C	0	0	237	0	0	U	J	C	Û	0	229	Ú	э	229	Ü	0	239	242	237
-10	0	0	241	G	0	0	3	0	0	C	Ü	J	0	244	C	C	243	244	243
-20	C	241	259	0	Ü	ø	٥	O	IJ	0	G	Ü	0	D	Q	0	248	255	250
-30	263	246	254	C	ð	Q	0	0	0	0	G	٥	262	G	C	0	267	259	263
-40	283	0	0	O	0	0	0	٥	0	0	O	0	266	0	Q	0	286	279	278
-50	307	288	0	C	C	0	Ü	0	0	0	0	334	307	0	C	291	0	357	318
-60	354	0	G	378	Ü	0	G	C	0	0	0	364	6	C	336	0	C	346	350
-70	376	380	363	C	0	0	3	G	0	O	t,	CI.	347	336	G	ũ	344	366	361
-80	375	373	359	369	370	366	391	0	٥	G	Ü	C	c	334	356	364	G	G	362

TOTAL OZONE JANUARY 1974



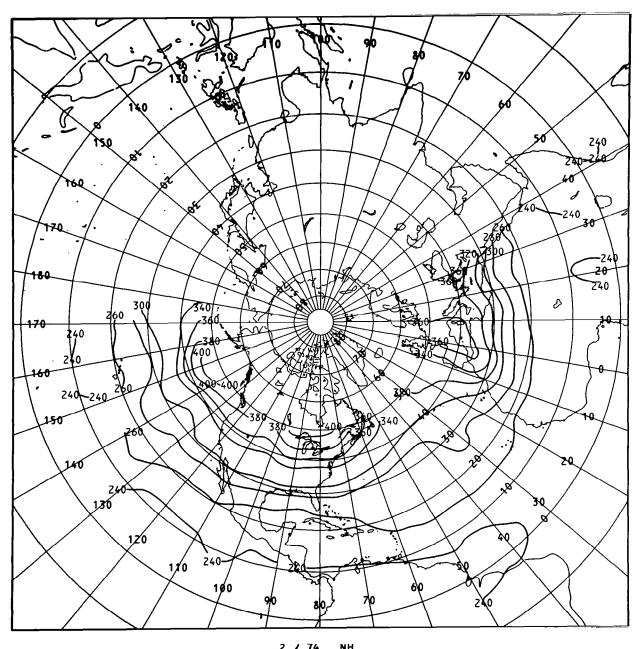
								1 /	74	NH									
LATITUDE					EAST	r				L	0 N C	G I	T U	DΕ					ZONAL
	٥	20	40	60	80	100	120	14C	160	180	20:0	220	240	260	2 80	300	320	340	MEAN
80	O	0	9	0	Ð	O	c	0	c	ø	٥	٥	Û	C	C	ú	a	Q	o
70	0	0	ø	0	O	O	G	0	o	0	U	0	3	0	G	G	O	G	Q
60	C	0	0	0	0	C	O	0	0	C	j	0	O	0	363	369	C	G	366
50	Ç	0	0	ū	C	O	Ü	C	0	0	0	G	309	287	С	449	Ĺ	40.4	360
40	O	0	0	C	Ĺ	C	o	c	C	٥	O	0	286	317	c	323	30 6	347	326
30	0	٥	0	O	5	0	0	G	0	0	Ü	٥	301	287	G	0	0	298	281
20	O	259	a	ø	O	0	0	C	0	o	o	0	261	249	240	244	259	0	253
10	243	246	0	0	o	0	0	0	0	G	230	0	230	o	227	239	243	c	238
0	247	0	0	0	3	0	0	G	0	0	233	0	222		237		0	.0	236

TOTAL OZONE JANUARY 1974



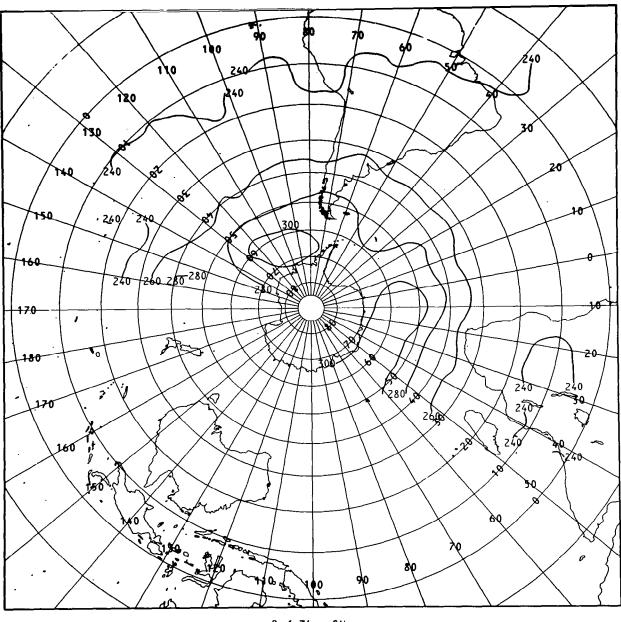
								1 /	74	SH									
LATITUDE					EAST	Г				Ł	N C	• I •	rui	D E					ZONAL
	0	20	40	60	80	100	120	140	160	180	200	220	240	260	2 8 C	300	320	340	MEAN
ŭ	247	0	0	0	C	0	0	C	0	0	233	C	222	0	237	229	0	C	236
-10	245	23 7	Ú	0	Q	0	U	0	U	C	. 0	Ú	ن	c	C	252	254	O	242
-20	٥	240	G	0	0	0	0	C	0	0	0	0	0	J	234	248	0	r	244
-30	243	٥	0	0	0	0	0	ű	0	0	0	0	0	o	261	٥	264	G	250
-40	268	0	265	0	0	0	0	0	0	Ü	G	0	0	260	271	0	C	0	262
- 50	0	32 5	C	0	0	0	0	C	0	0	0	٥	۵	308	C	259	0	294	300
-66	C	334	331	0	0	0	O	C	0	0	0	0	U	0	C	0	299	0	313
-70	303	326	0	0	C	0	0	0	0	0	٥	O	Ú	o	304	289	276	320	3 0 0
-80	296	0	G	0	ű	0	0	0	0	Ü	0	0	0	G	C	Ü	3	C	292

TOTAL OZONE FEBRUARY 1974



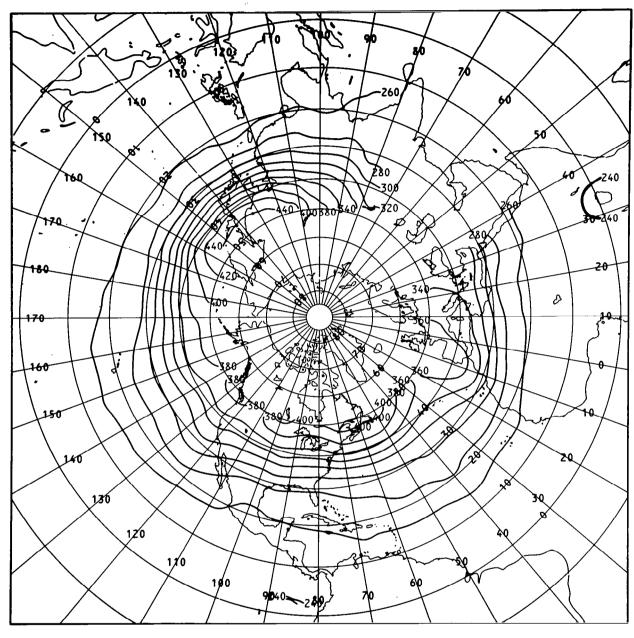
								2 /	14	NH									
LAT I TUDE					EAS	T				L (ואכ	G I	TU	DE					ZONAL
	0	20	40	60	80	100	123	140	160	180	200	220	240	260	2 & C	360	320	340	MEAN
80	0	0	0	0	0	0	0	0	0	0	0	5	0	0	C	G	Ü	0	0
70	0	0	0	0	0	0	0	0	6	G	Ū	0	0	0	C	Ü	0	Ü	0
60	0	0	0	0	0	0	0	0	0	C	ø	D	٥	C	C	0	0	0	U
50	G	9	0	C	C	0	U	0	0	Ġ	ō	Ü	0	J	G	O	O	G	0
40	357	333	C	0	0	0	0	C	0	316	350	369	329	335	366	348	316	326	341
30	336	283	Q	0	0	0	O	0	0	0	271	297	290	284	285	267	264	271	289
20	256	249	0	0	0	٥	ø	Ö	D	0	260	275	258	244	253	265	267	252	260
10	247	240	235	0	0	0	Ü	0	0	C	244	239	232	240	237	242	250	253	242
0	248	236	237	٥	G	0	0	0	0	0	231	229	228	230	227	230	233	250	236

TOTAL OZONE FEBRUARY 1974



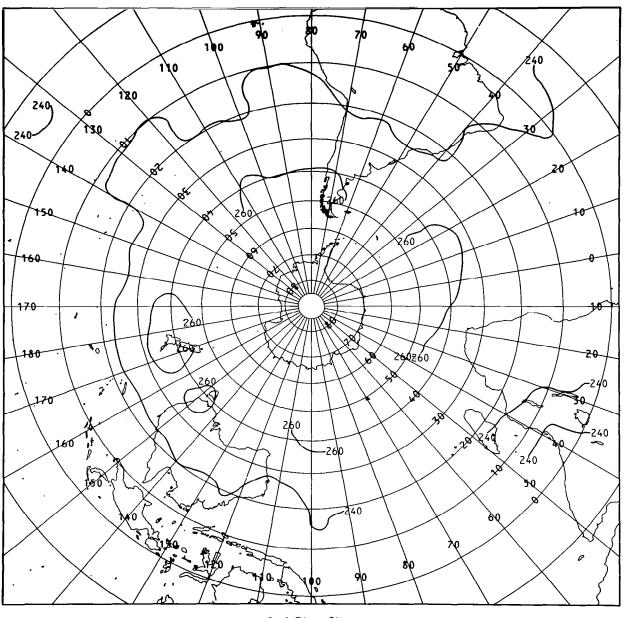
								2 /	74	SH									
LATITUDE					EAST	r				Lí) N C	. 1	T U I	DE					ZONAL
	Ç	20	40	60	80	100	120	140	160	18C	200	220	240	260	2 E C	300	32 Ú	340	MEAN
O	248	236	237	0	o	0	0	0	O	C	231	229	228	230	227	23 0	233	250	236
-16	248	238	239	O	0	O	٥	0	0	٥	235	232	241	234	239	248	248	256	242
-20	248	246	250	0	0	C	o	0	٥	Ú	237	239	245	239	242	251	252	250	245
-30	250	244	255	C	0	0	0	0	C	C	256	230	250	248	253	261	258	254	251
-40	269	255	246	0	G	0	υ	O	e	Ŭ	٥	264	271	266	265	275	275	277	265
-50	297	287	3 0 U	0	e	C	0	0	0	0	ն	260	307	315	257	302	279	287	284
-60	30 7	324	330	315	٥	0	G	0	0	C	C	293	268	281	285	328	283	283	301
-70	288	300	285	263	0	0	ΰ	0	0	0	O	0	316	326	307	295	279	289	294
-80	277	286	0	275	0	266	O	0	O	0	٥	0	0	278	0	0	286	O	280

TOTAL OZONE MARCH 1974



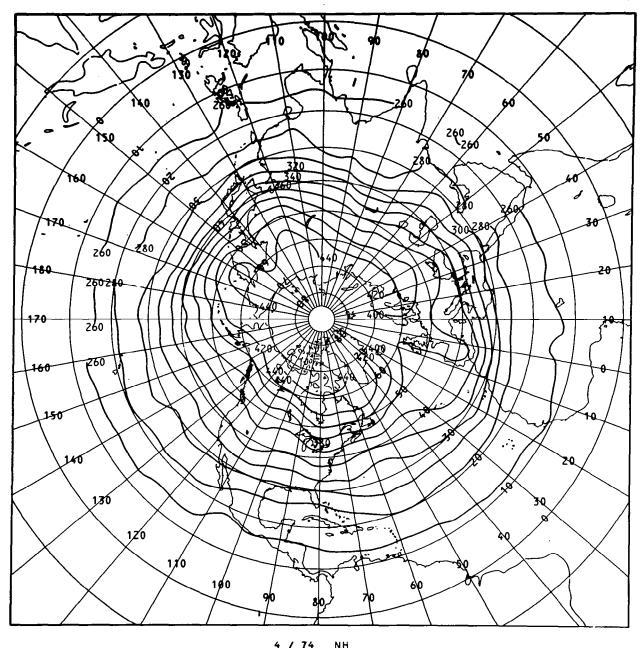
								3 /	74	NH									
LATITUDE					EAS	ī				L) N (3 I 3	T U	DE					ZONAL
	C	20	40	60	80	100	120	140	160	180	200	220	240	250	280	30 U	320	340	MEAN
80	Ú	0	Ū	0	G	0	o	e	0	0	ø	u	O	0	C	U	ü	G	O
70	Ü	C	Ü	C	0	٥	0	0	0	0	0	0	0	0	0	0	Ü	C	0
60	c	0	0	0	0	0	0	0	0	0	O	G	0	0	G	0	0	O	0
50	365	0	o	C	0	υ	Ũ	G	0	C	Ü	336	Ü	0	G	O	458	368	412
40	355	309	O	C	303	365	385	454	445	391	353	337	353	346	327	374	358	367	360
30	302	274	0	G	277	281	280	299	294	275	300	297	304	279	283	294	3 J3	305	293
20	253	259	266	0	274	252	262	251	254	262	266	261	270	248	262	270	282	274	263
10	246	248	241	0	0	241	235	225	224	241	248	247	236	240	243	240	242	251	242
0	250	245	248	0	0	237	223	231	229	233	236	231	233	237	234	235	233	240	236

TOTAL OZONE MARCH 1974



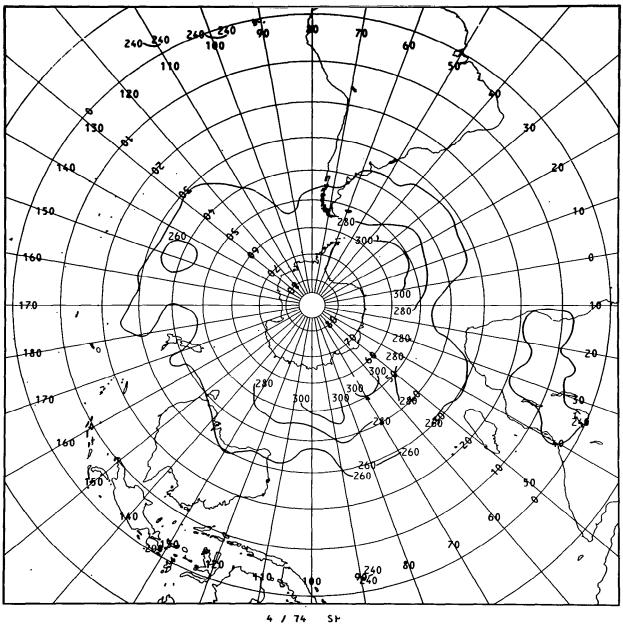
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LATITUDE					EAST	Г				L) N (3 I 1	וטו	Œ					ZONAL
	C	20	40	60	80	100	120	146	160	180	200	225	240	260	286	300	32 Q	340	MEAN
o	250	245	248	0	0	237	223	231	229	233	236	231	233	237	234	235	233	240	236
-10	252	244	236	0	O	237	228	231	226	227	233	238	243	237	237	234	240	247	236
- 20	250	243	244	0	0	241	240	241	234	231	234	238	242	236	245	240	242	245	239
-30	249	249	251	0	0	240	245	253	254	257	246	247	249	245	248	254	251	257	25û
-40	265	262	246	0	C	272	256	258	250	265	251	252	251	258	248	250	258	260	257
-50	G	0	0	0	0	0	U	0	ΰ	Ü	0	Ü	Ω	n	C	0	0	O	Û
-60	C	0	0	C	0	0	0	0	0	Ü	o	C	0	0	C	o	0	0	0
-70	0	0	0	0	ů	0	o	Ú	G	0	0	0	O	ø	C	0	c	O	C
-80	0	0	o	υ	0	9	Ü	O	Ü	Ü	G	ŋ	Q	0	C	0	G	C	Ù

TOTAL OZONE APRIL 1974



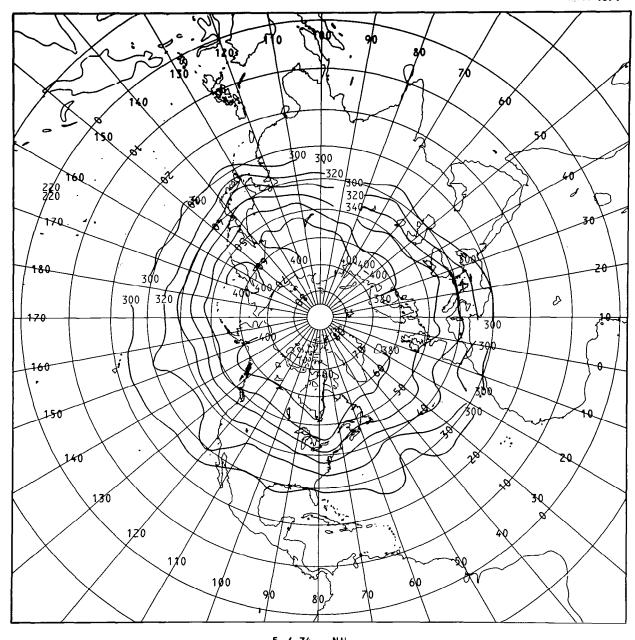
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LATITUDE					EAS	T				L) N (1 6	ו ט ז	DE					ZONAL
	O	20	40	60	80	100	120	140	160	180	260	220	240	26C	280	300	320	340	MEAN
80	0	0	a	G	0	0	Ü	C	U	O	C	O	O	Ü	ć	t;	G	0	o
70	380	0	416	461	451	436	430	446	456	0	9	454	453	491	452	444	414	416	436
66	Ċ	428	0	422	396	432	455	409	455	0	421	40 7	417	411	441	428	446	386	417
50	363	380	405	398	370	0	404	401	462	440	379	375	358	358	421	436	390	374	391
40	385	331	369	319	312	331	321	359	361	350	368	316	336	346	368	336	333	372	347
30	0	284	0	293	265	245	322	291	300	297	276	310	305	305	288	314	315	344	298
20	261	267	268	261	269	262	269	262	276	274	278	270	276	266	269	277	272	271	269
10	.256	254	25 3	0	249	242	231	244	234	249	254	244	244	256	250	247	252	256	249
0	237	243	246	239	238	o	234	234	236	232	239	236	235	240	235	229	240	244	237

TOTAL OZONE APRIL 1974



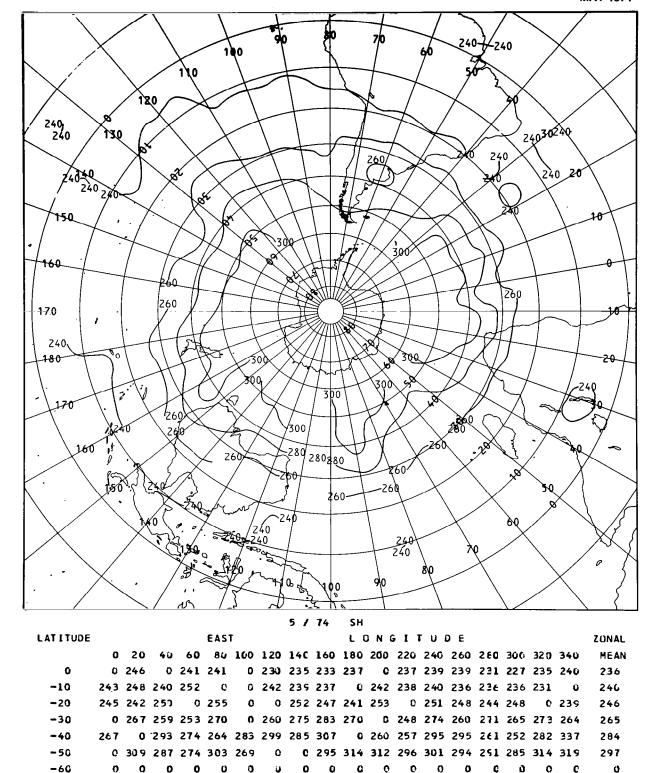
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LATITUDE					EAST	Γ				L	3 N (3 1 3	rui) E					ZONAL
	Ū	20	40	60	80	100	120	140	160	180	26.0	226	240	260	286	300	320	340	MEAN
0	237	243	246	239	238	O	234	234	236	232	239	236	235	240	235	229	240	244	237
-10	247	239	246	236	C	240	235	231	229	υ	238	236	245	240	236	233	237	246	238
-20	247	247	258	G	246	245	239	243	250	244	231	232	242	246	245	239	G	25U	242
-30	250	246	259	270	261	247	258	246	259	267	251	258	249	250	254	258	255	260	256
-40	264	G	275	268	283	268	264	275	258	252	265	261	269	263	257	261	273	279	263
-50	313	265	O	298	280	C	297	261	266	0	Û	291	278	263	255	295	279	311	282
-60	0	0	0	0	e	C	0	C	0	Ú	0	Ü	٥	ð	C	O	Ü	Q	0
-70	Ü	0	ú	0	e	0	Ü	0	0	0	Ũ	Ú	Ú	0	C	Ú	Ú	ΰ	0
-80	0	O	0	0	0	0	υ	0	0	0	IJ	٥	0	0	G	٥	0	C	Ú

TOTAL OZONE MAY 1974



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LATITUDE					EAS	Т				L) N (G I	TU	DΕ					ZONAL
	Đ	20	4C	60	80	100	123	140	160	180	200	220	240	26 0	2 E C	300	320	340	MEAN
80	0	o	C.	0	0	U	U	381	380	C	U	U	5)	O	C	U	O	G	383
70	378	345	O	447	422	456	402	408	J	393	364	424	424	463	355	398	384	384	398
60	375	40 4	384	361	433	390	394	394	419	419	398	423	390	416	369	387	413	397	394
50	0	362	355	367	0	0	391	382	406	378	384	394	369	383	4G 2	367	379	328	378
40	352	0	316	ð	290	333	ú	377	335	313	333	317	353	326	336	326	335	335	327
3ა	Ú	297	265	267	275	e	277	271	290	306	Ü	313	328	30 6	254	310	3 03	317	297
20	264	27 i	260	274	υ	264	2 85	289	281	C	291	282	272	27 3	280	295	273	D	276
10	263	255	226	0	256	244	Û	253	264	257	253	246	243	245	250	2 5 2	0	257	252
0	0	246	0	241	241	Ō	230	235	233	237	O	237	239	239	231	227	235	240	236

TOTAL OZONE MAY 1974

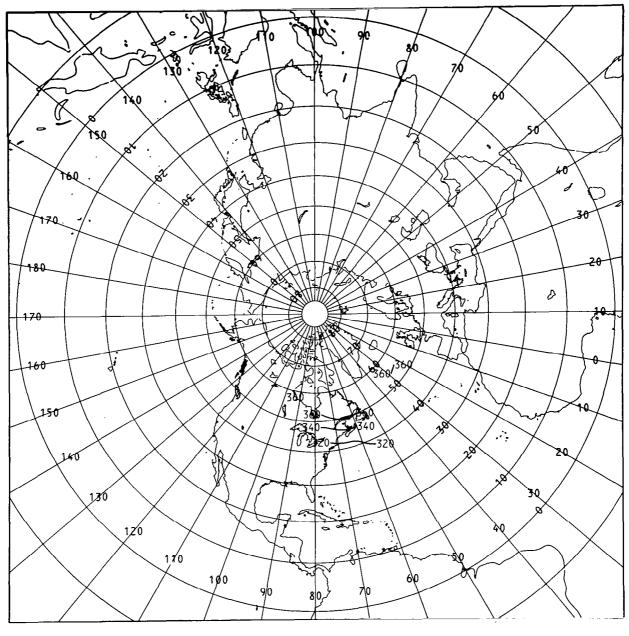


-70

-80

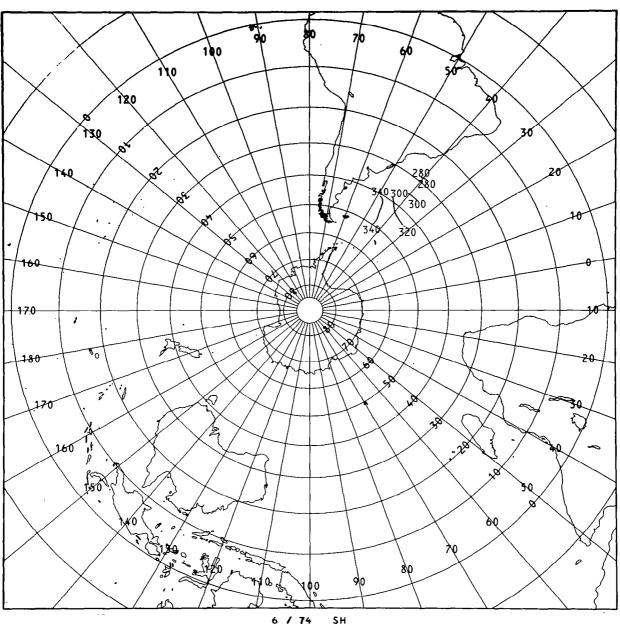
0

TOTAL OZONE JUNE 1974



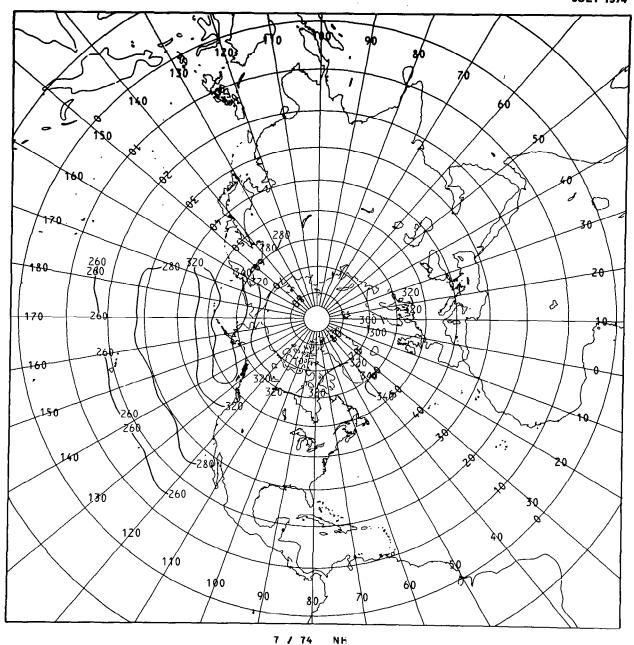
								6 /	74	NH									
AGUT 1 TAL					EAS	Γ				L) N (5 I ·	ΓUί	ÞΕ					ZONAL
	C	20	40	60	80	160	120	146	160	180	200	220	240	260	2 E C	300	320	340	ME AN
80	C	0	c	0	ú	o	O	O	0	O	a	O	C	9	O	0	Ú	o	0
70	ø	40 4	0	364	¢	О	0	33 2	Ü	0	ú	0	372	412	371	Ũ	0	0	372
60	c	341	v	c	Ü	0	o	328	0	0	389	390	0	C	422	C	o	O	373
50	٥	0	9	0	340	o	0	ú	0	C	441	Ü	O	J	323	344	0	354	350
40	0	0	329	C	0	0	0	C	O	365	c	C	0	333	C	327	O	293	318
30	0	0	280	O	0	O	Ü	C	275	339	o	Ü	0	0	Q	299	0	299	290
20	c	0	279	U	C	O	o	τ	271	274	0	O	9	0	C	273	0	٥	274
10	Ü	·)	255	O	Ċ	Э	Ü	С	264	C	Ü	O	245	0	0	255	0	0	255
a	٥	9	246	O	i)	Ō	0	ı	0	0	S	236	241	C	C	Ü	237	Q	236

TOTAL OZONE JUNE 1974



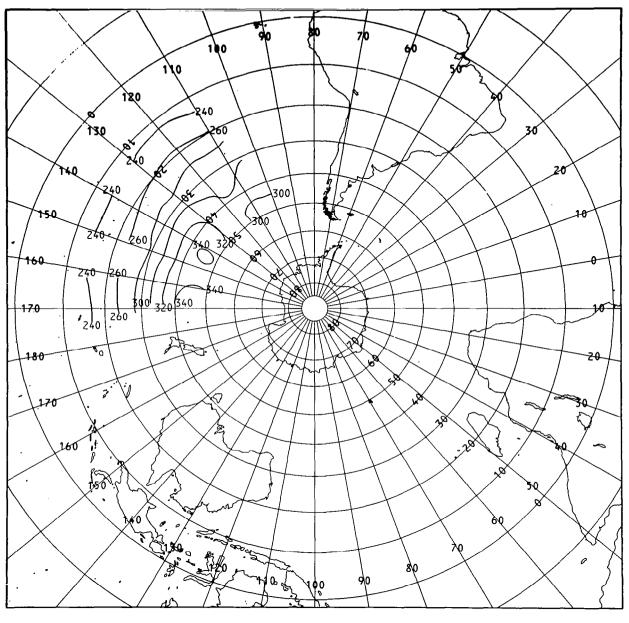
								-											
LATITUDE					EAS	T				L) N (G I 1	ru	DΕ					ZONAL
	(-	20	40	60	80	100	120	140	1 60	180	200	220	240	260	2 € €	300	32 Ü	346	ME AN
٥	O	0	246	O	0	Ü	o	G	O	O	٥	236	241	Ů	G	e	237	0	236
-10	242	0	O	0	0	236	Э	0	o	0	Ü	239	e	0	0	236	236	C	237
-20	241	0	J	0	G	255	Ü	C	Ü	0	U	Q	0	Ü	25C	250	Ú	C	248
-30	298	0	Ü	265	Ĺ	C	ં	Ċ	ວ	Ú	0	G	0	ာ	271	9	285	O	277
-40	299	0	9	278	C	O	ŋ	C	0	Q	352	o	O	Ú	G	U	327	0	304
-50	O	C	٥	320	C	3	u	C	0	337	C.	C	Ü	298	C	C	303	ប	319
-60	0	0	Ü	0	Û	0	e	c	O	C	U	υ	O	0	C	G	0	O	o
- 70	0	0	0	O	O	0	υ	C	0	0	O	C	0	Ü	G	Ü	0	0	0
-80	C	0	ij	0	9	0	õ	G	0	0	0	Ú	υ	Ú	ű	Ü	٥	C	Ģ

TOTAL OZONE JULY 1974



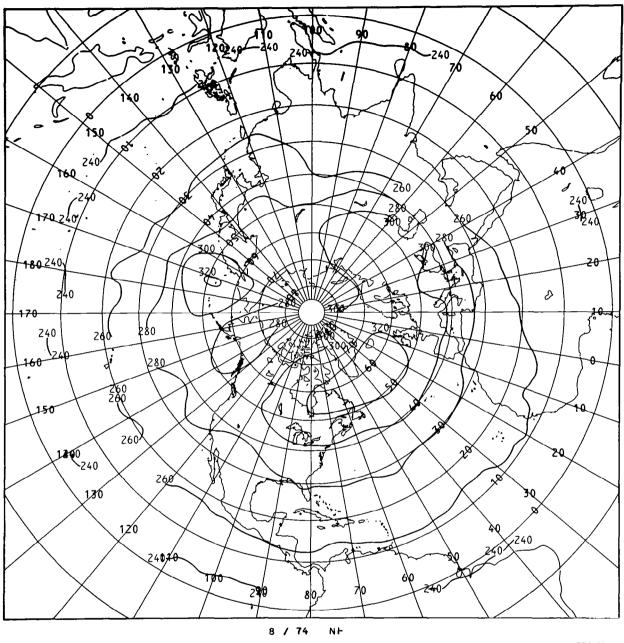
LAT I TUDE EAST LDNGITUDE ZONAL 80 100 120 140 160 186 200 220 240 266 286 306 326 340 20 MEAN C 80 274 70 0 276 261 C 298 0 305 0 312 323 319 295 63 0 353 341 338 320 **ს 305 334 351** 333 50 0 288 301 0 333 362 362 325 0 340 C 328 0 279 0 312 302 306 293 ß **0** 290 293 30 266 260 O 281 20 0 266 0 264 274 260 264 10 0 245 247 243 254 248 0 261 251 0 234 9 222 0 228 0 225 236 6 234 232 233

TOTAL OZONE JULY 1974



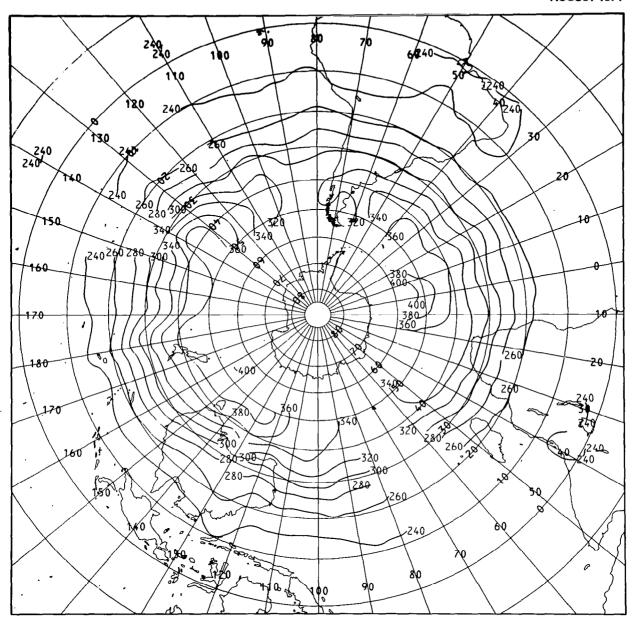
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LAT I TUDE					EASI	Γ				LO	NO	; I ;	rυį	3 C					ZGNAL
	Q	20	40	60	86	100	120	140	16¢	180	200	22¢	243	260	2 & C	3 ∪ ∪	320	346	MEAN
0	e	0	ō	0	G	234	O	222	Ü	228	ຄ	225	236	ა	G	234	232	O	233
-10	Ĝ	c	0	C	Ü	223	ü	229	o	216	236	234	236	Ü	£	242	O	248	234
-20	C	0	0	0	0	О	3	238	246	G	247	250	272	O	C	3	O	248	254
-30	Ü	0	292	C	0	Ü	G	O	288	Ų	283	285	293	ა	e	0	0	Û	289
-40	311	0	362	0	9	C.	c	C	0	O	342	342	309	298	312	e	C	0	331
-50	G	0	0	0	Ĉ	Ó	Ú	G	0	0	335	C	ũ	0	C	Ö	0	Ŀ	308
-60	Ü	0	o	0	3	0	Ü	0	G	0	9	Ĺ	0	0	C	0	0	0	0
-70	Ü	0	0	0	Ü	0	Û	C	0	0	6	0	0	3	C	Ü	0	ū	o
-8ú	L	Ú	Q	C	G	c	ပ	C	û	0	O	0	0	0	C	C	0	C:	v

TOTAL OZONE AUGUST 1974



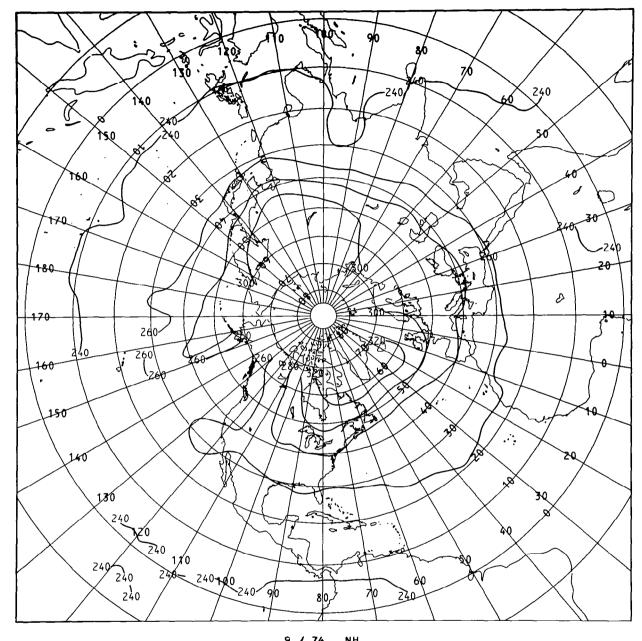
								٠,	• •											
LATITUDE					EAS	Ţ				Lí) N C	3 I 3	r u i	DE					ZONAL	
	ō	20	40	60	86	100	120	140	160	180	200	220	240	260	2 80	30 U	320	340	MEAN	
68	Ç.	0	G	O	Ü	0	J	C	٥	O	C	Û	Ü	C	Q	0	0	0	278	
70	316	304	301	299	30 2	289	287	288	288	290	271	276	294	300	300	30 3	312	305	296	
60	308	314	O	316	316	295	306	270	315	325	283	246	295	289	334	339	337	338	305	
50	303	291	346	312	U	289	278	274	299	321	294	267	257	306	325	318	323	Ü	303	
40	Ċ	292	301	0	259	0	273	267	292	279	314	279	284	9	255	296	3C 3	292	287	
30	268	271	258	C	c	246	268	276	263	256	C	266	Ú	270	278	279	277	0	268	
20	26¢	258	256	C	251	244	255	244	0	259	253	O	264	268	273	267	٥	267	258	
10	255	248	249	0	247	0	244	244	237	239	O	248	251	252	251	0	254	258	249	
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TOTAL OZONE AUGUST 1974



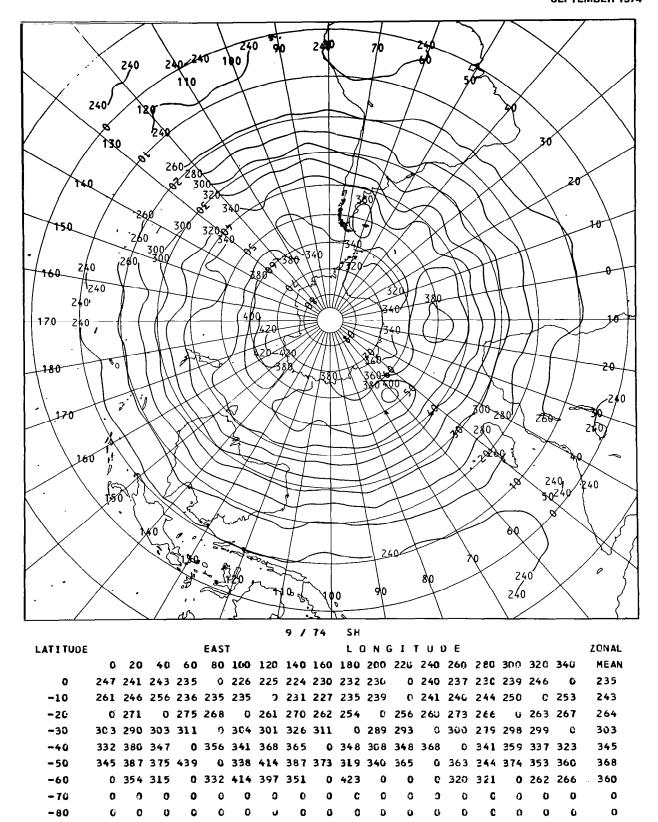
								8 /	74	SH									
LAT I TUDE					EAST	ī				LC) N (3 I I	U) E					ZONAL
	0	20	40	60	86	100	120	140	160	180	200	220	240	260	280	300	320	340	MEAN
0	249	246	239	C	Ġ	229	233	221	230	L	234	236	232	235	232	240	241	G	235
-10	251	246	247	0	237	236	239	228	0	237	237	0	235	231	244	236	0	246	237
-20	274	256	252	251	254	٥	246	24¢	258	261	o	245	249	257	266	0	261	259	256
-30	308	298	297	289	C	318	279	288	321	0	305	305	357	311	0	360	309	0	303
-40	0	364	347	320	C.	334	323	354	C	393	385	394	348	O	345	338	347	347	353
-50	40 2	332	330	302	Ð	355	Ú	C	397	C	371	418	C	318	358	291	367	0	363
-60	Û	0	ა	0	C	0	Ü	C	9	0	D	C	G	O	c	ø	0	0	0
-70	0	0	0	0	0	0	0	0	0	0	Ü	Ü	6	0	0	0	0	0	o
-80	G	0	O	Ü	0	0	Ü	ű	Ö	0	0	ũ	ø	บ	c	0	0	٥	O

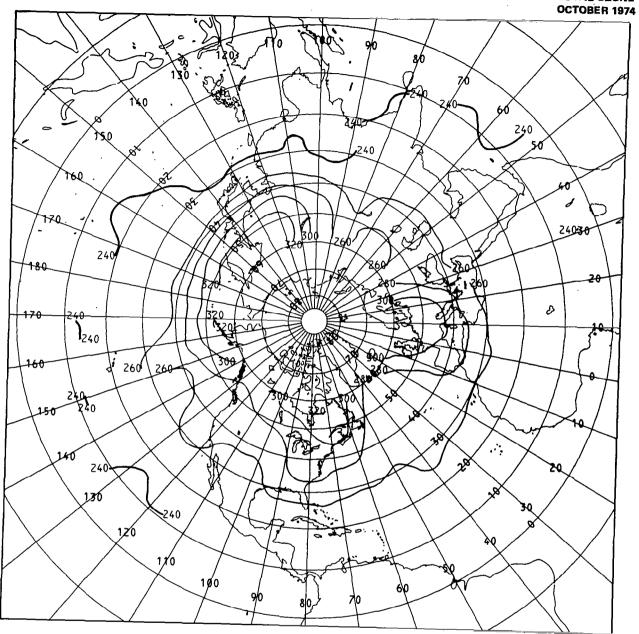
TOTAL OZONE SEPTEMBER 1974



								9 /	74	NH									
LATITUDE					EAS	Г				L) N (3 I -	r U I	DΕ					ZONAL
	Û	20	40	60	80	100	120	140	160	180	200	220	240	260	260	300	320	340	MEAN
80	ø	G	0	0	0	0	Ú	0	G	Ü	0	Q	G	0	C	U	Ú	G	O
70	C	0	O	G	O	301	280	C	U	J	Э	248	265	308	C	338	314	315	297
60	307	282	285	261	325	313	324	322	303	283	Ü	256	247	287	321	339	322	349	302
50	272	277	282	294	298	307	316	280	263	297	305	248	G	292	316	288	282	0	289
40	O	282	281	265	261	284	284	257	Ú	264	291	266	262	o	275	264	267	278	270
30	265	261	250	254	246	239	257	267	253	282	264	255	ΰ	260	256	253	272	0	258
20	255	257	251	255	247	241	0	251	251	250	245	0	257	247	253	250	0	256	251
10	C	247	249	248	236	Ü	238	249	231	243	0	0	243	249	246	G	249	245	244
o	247	241	243	235	0	226	225	224	23û	232	230	Q	240	237	230	239	246	0	235

TOTAL OZONE SEPTEMBER 1974



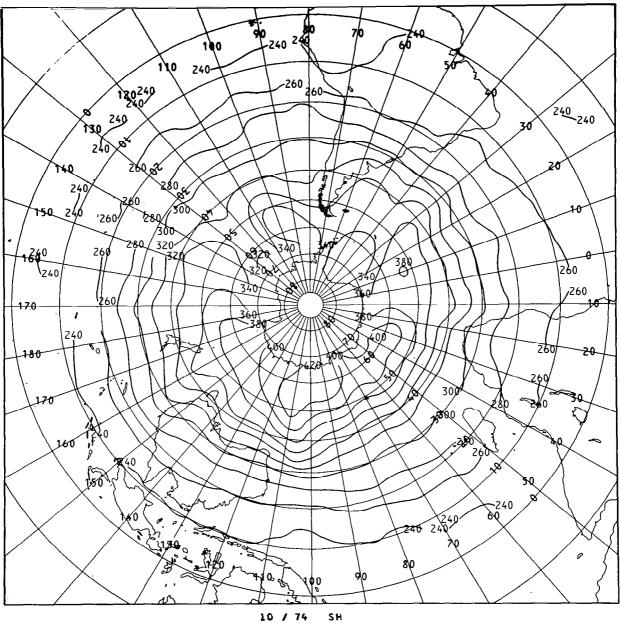


LATITUDE					EAS	T				L	0 N	G I	ΤU	DΕ					ZONAL
	O	20	40	60	80	100	120	140	160	180	200	220	240	260	2 E C	300	32 u	340	MEAN
80	D									O									0
70	0	0	0	6	0	G	0	0	٥	O	8	0	0	a	o	0		-	0
60	299	0	0	0	281	0	0	325	O	0	0	328	288	_	_				302
50	315	300	272	246	256	283	334	G	328	338	312	347	0	295	250	316	261	270	296
40	320	286	252	C	252	275	293	276	0	257	286	230	256		211	270	261	277	
30	271	249	247	250	228	226	244	C	246	255	243	261	0	25.5	211	210	201	2/1	268
20	255	0	247	246	240	235	0	22 R	248	254	247	201	247	200	213	220	288	259	254
10	0	248	248	234	239	0	222	228	220	220	241	771	240	246	241	246	248	247	244
Ð	240	2/7	242				2.52	220	236	229	U	231	240	Ü	234	242	242	247	239
J	248	241	243	235	δ	224	222	0	228	228	232	228	0	235	226	238	244	0	234

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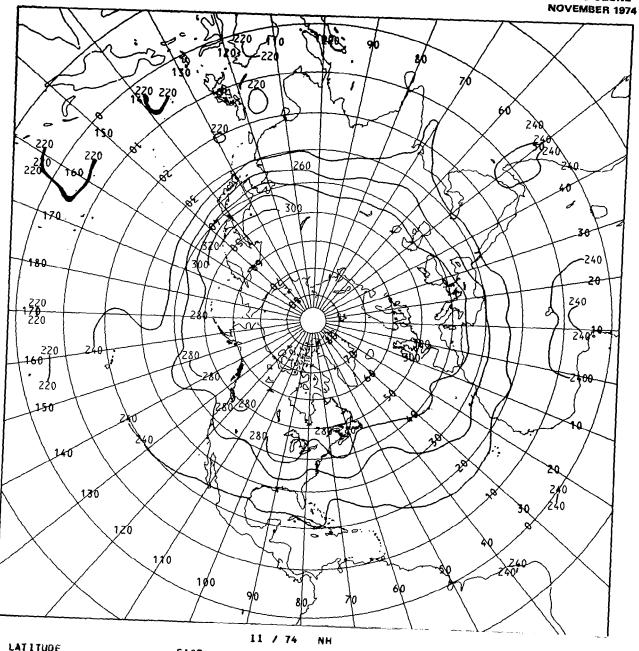
10 / 74

TOTAL OZONE OCTOBER 1974



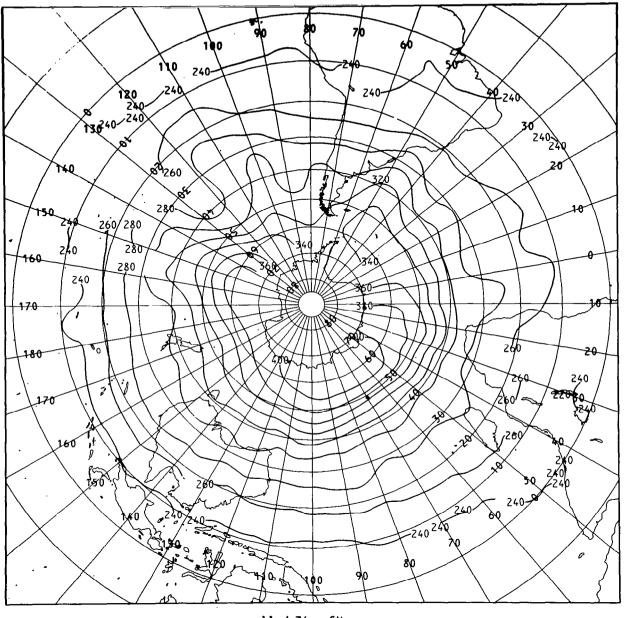
									14	311									
LATITUDE					EAST	Г				LO) N (3 1 1	r U I) E					ZONAL
	Ù	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	MEAN
0	248	247	243	235	0	224	222	0	228	228	232	228	0	235	226	238	244	C	234
-10	264	0	248	244	233	229	0	241	232	232	250	9	246	249	2 6 0	248	249	256	244
-20	0	269	275	279	26 6	0	262	265	277	256	3	264	274	C	281	254	260	268	267
-30	293	282	304	307	ð	318	291	C	326	284	282	300	0	293	294	314	303	Ü	298
-40	322	328	323	0	344	379	359	350	G	343	32G	0	317	316	319	342	342	32¢	336
-50	375	348	465	438	Ü	391	393	398	380	356	343	345	õ	384	327	344	328	C	371
-66	362	44 3	438	424	393	474	443	399	392	366	363	370	0	432	C	373	332	372	387
-70	0	c	0	366	0	426	444	C	٥	G	326	ŭ	Ü	Ù	0	0	Ü	0	361
-80	0	Ö	٥	O	0	0	U	C	0	0	ō	£	9	၁	C	Ü	Û	Ü	v

TOTAL OZONE



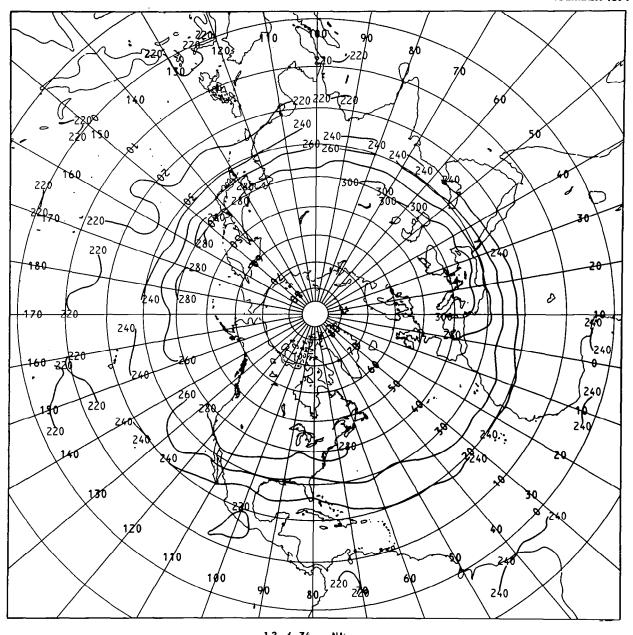
								11 /	74	NH	í								
LAT I TUDE					EAS					L	N G	G I	Tu	DF					
	C	20	3 40	60	80	100	1 20	140	160	180	200	220	240	343	200			340	ZONAL
80	O	0	ម	0		a	o	c	_					260	280	300	320	340	MEAN
70	0	a	c	· c	_	•	-	_		•	ລ	ن	J	9	0	0	O	٥	Ü
60	n	G		•	•	•	_	•	Ü	C	Q	O	9	Ü	C	o	U	Ċ	c
50	0	-	-	•	-	**	•	•	0	_		Ü		Q	0	a	G	ັ້	c
		•	·	0	Ü	290	330	C	332	304	0	27R	۸	30.3		•	-	_	U
4C	280	291	272	a	278	288	260	207		20.			. 9	302	·	216	299	e	3u 6
30	268	264	O	234	231	220	241	471		224	248	30 1	284	288	252	280	0	281	276
20	237	ח	230	222	222	238	241	O	226	225	248	257	227	247	250	259	258	281 262	244
10					6.32	210	9	225	236	23 G	240	251	2/0	225	_				235
					230	Z Z J	221	223	n	222	222	222	200			_			
O	239	242	3	226	218	222	222	Λ	21.	22.			461	225	228	231	236	230	228
							- 2.2	U	210	221	225	224	O	225	219	226	222	^	220

TOTAL OZONE NOVEMBER 1974



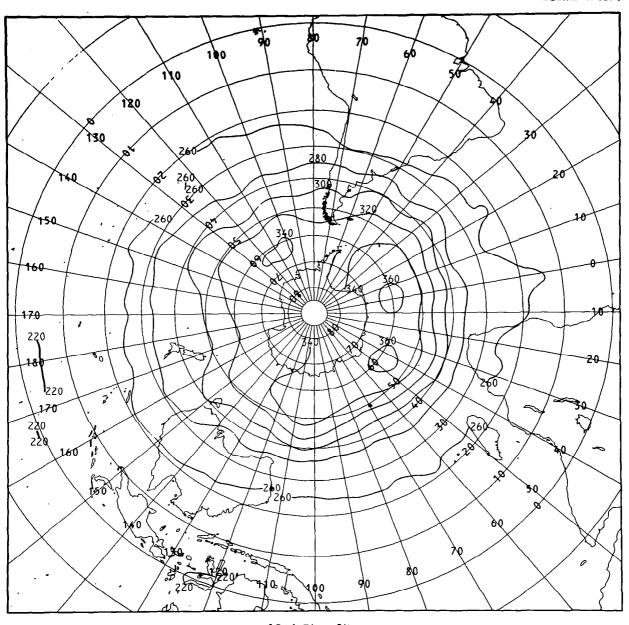
							1	11 /	74	SH									
LATITUDE					EAST	Γ				L) N (• I 1	T U I	DΕ					ZONAL
	0	20	40	60	80	100	120	140	160	180	20û	220	240	260	280	3 00	320	346	MEAN
0	239	242	0	226	218	222	222	0	216	221	225	224	0	225	219	226	233	C	228
-10	257	0	254	241	246	235	٥	234	234	235	238	238	244	244	Q	234	248	254	243
-20	0	257	271	265	267	258	261	260	0	256	257	262	276	0	252	249	249	267	261
-30	265	274	C	28 1	G	252	299	C	290	283	303	304	G	304	27C	282	275	C.	284
-40	30 3	340	311	285	295	331	306	323	284	306	339	0	273	328	305	302	٥	327	306
-50	387	387	399	358	358	394	360	357	324	333	364	339	0	334	313	315	363	321	345
-60	342	379	409	434	410	402	404	352	399	391	403	363	335	378	250	364	342	346	377
-70	362	338	0	418	394	433	414	402	414	458	404	371	333	Ü	Q	Ü	0	394	383
-80	0	0	0	U	0	0	Ü	0	0	0	c	Ü	e	Û	G	Ü	0	C	Ú

TOTAL OZONE DECEMBER 1974



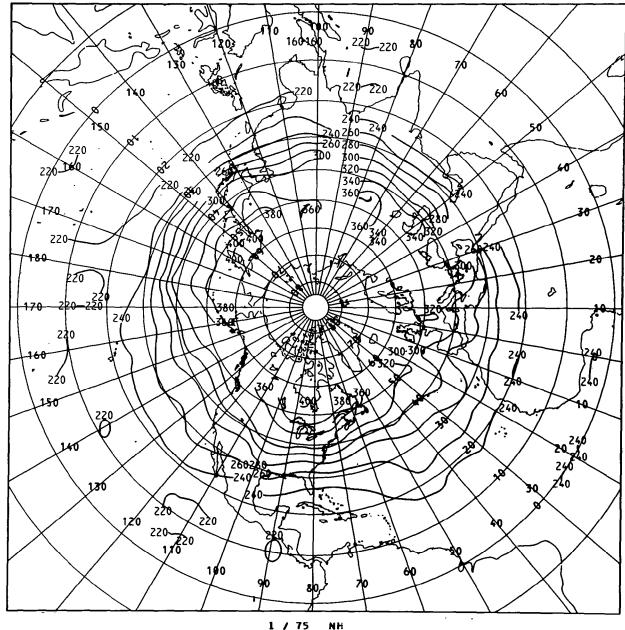
12 / 74 LATITUDE EAST LONGITUDE ZONAL 80 100 120 140 160 180 200 220 240 260 280 300 320 340 20 MEAN 80 0 70 o 60 ٥ 301 337 40 275 275 304 294 291 231 278 0 315 300 0 288 305 309 273 0 271 293 30 0 260 247 237 251 223 236 255 260 255 240 0 272 280 257 3 20 0 221 227 227 0 221 217 C 226 249 234 219 C 235 245 233 229 10 231 228 222 0 223 208 215 220 0 214 218 217 223 0 222 221 C 231 222 0 240 241 0 236 231 220 219 0 223 215 0 222 0 226 225 0 231 239 227

TOTAL OZONE DECEMBER 1974



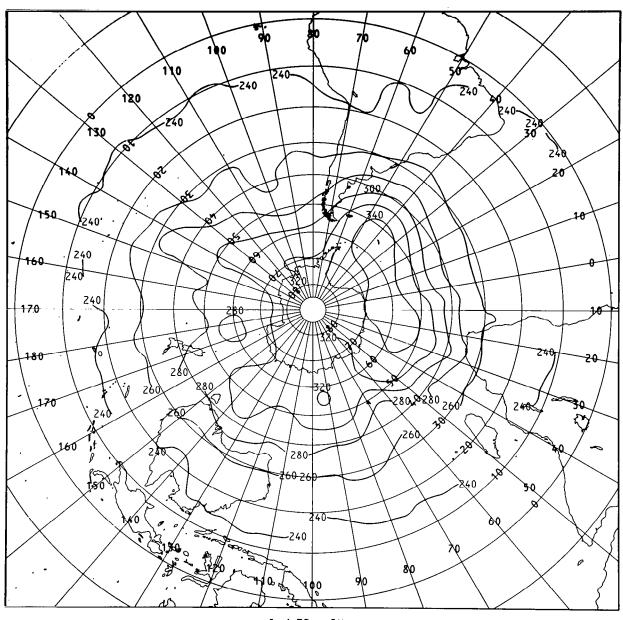
12 / 74 SH ZONAL EAST LONGITUDE LATITUDE 40 60 80 100 120 146 160 186 206 220 240 260 266 306 326 340 MEAN 6 20 6 223 215 0 236 231 220 219 0 222 0 226 225 227 G 0 231 249 239 -10 0 259 240 240 237 235 239 232 6 228 243 240 238 253 U 252 235 248 267 0 254 244 252 261 -20 0 256 246 256 251 0 273 267 256 261 264 268 0 267 269 269 269 0 282 276 282 270 -30 0 290 282 255 275 271 293 290 0 280 290 312 293 290 309 296 267 293 301 -40 325 349 340 388 329 327 350 307 0 296 294 294 313 288 322 298 318 324 330 -50 0 337 313 326 347 350 347 -60 383 362 375 375 355 377 354 362 321 305 342 333 361 352 352 354 327 337 325 336 335 324 326 340 340 344 324 334 332 352 337 -70 0 339 339 338 341 353 343 332 330 345 333 313 308 316 335 327 323 347 335 -80

TOTAL OZONE JANUARY 1975



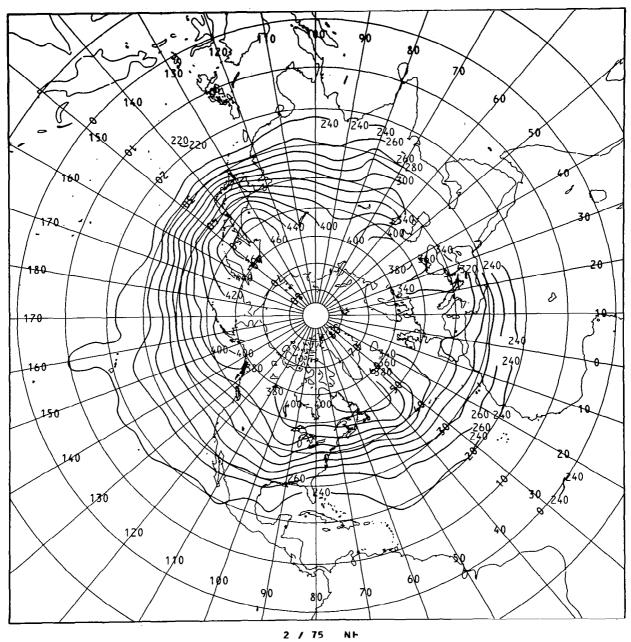
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LATITUDE					EAS	T				L	DN	G I	ŤU	DΕ					ZONAL	
	Ü	20	40	60	86	100	1 20	146	160	18C	200	220	240	260	280	300	320	340	MEAN	
86	Û	0	C	G	G	0	0	G	G	C	o	C	0	ပ	a	O	0	0	o	
70	G	0	0	0	C	0	0	C	υ	G	õ	G	0	0	C	0	0	6	0	
60	0	0	0	0	٥	0	0	0	G	0	0	0	ō	0	0	0	0	0	342	
50	370	311	0	335	Ĺ	412	402	0	395	40 5	0	319	343	369	351	0	318	316	360	
40	332	30 5	Ø	327	326	356	9	0	333	328	2 83	O	300	351	3C 1	286	322	322	315	
30	275	293	0	253	285	D	256	C	236	233	0	267	268	250	246	٥	281	283	258	
20	245	232	0	226	0	216	221	214	220	G	235	232	234	227	0	229	237	234	228	
10	0	229	0	0	226	212	215	216	0	225	221	223	219	ò	223	222	0	225	221	
0	248	233	٥	236	229	.D	219	G	224	225	G	233	233	224	225	l o	232	238	229	





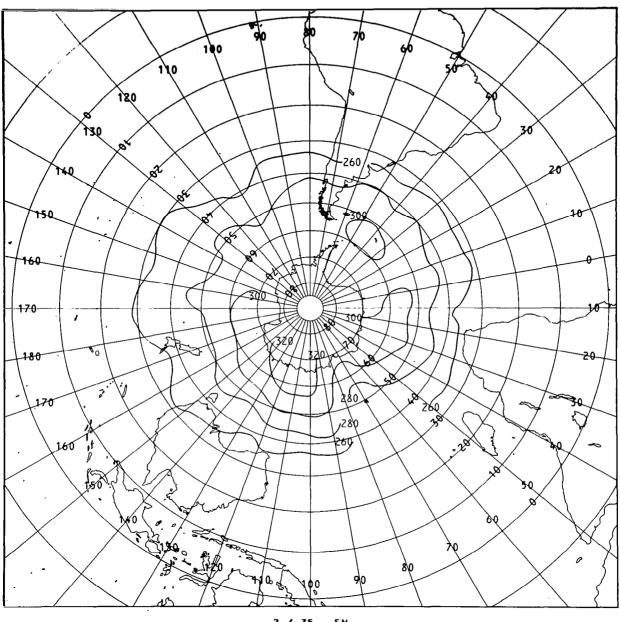
1 / 75 SH **LATITUDE EAST** LONGITUDE ZONAL 80 100 120 140 160 180 200 220 240 260 260 300 320 340 ME AN 0 0 224 225 229 -10 251 238 235 234 0 237 237 233 238 0 231 236 227 0 239 248 247 238 -20 253 247 238 0 245 0 243 231 0 246 249 242 252 249 245 238 0 262 247 -30 0 255 265 265 257 0 273 250 267 253 263 257 0 267 258 260 - 40 0 270 262 280 289 0 299 0 276 272 271 255 271 288 292 281 279 -50 318 372 0 309 313 293 290 282 280 294 350 308 334 348 334 323 316 317 -60 0 309 294 281 275 265 303 0 319 312 374 352 318 - 70 0 350 0 311 324 291 286 301 310 0 303 312 329 319 317 326 327 334 313 -80 0 345 332 0 G 328 0 314 0 0 O C 0 0 334 322

TOTAL OZONE FEBRUARY 1975



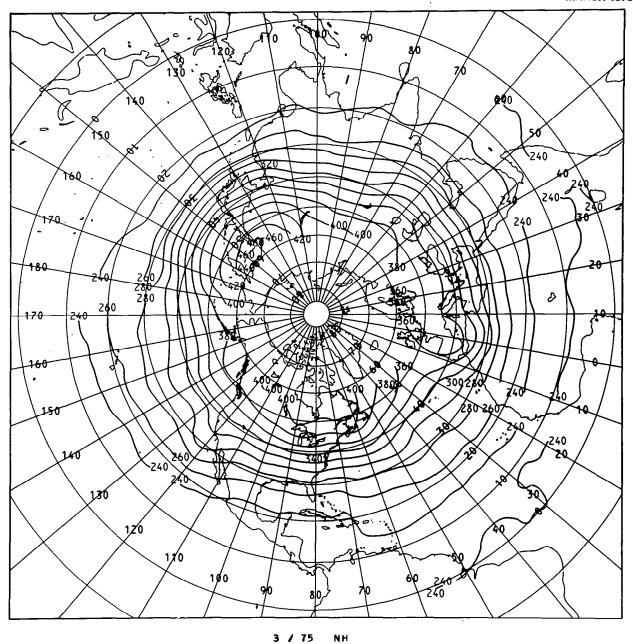
ZONAL LONGITUDE LATI TUDE EAST MEAN 80 100 120 140 160 180 200 220 240 260 280 300 320 340 J 80 0 70 395 0 390 60 391 448 370 386 369 346 362 380 417 424 326 50 480 368 0 333 366 316 335 0 319 322 325 358 40 0 258 286 259 239 287 271 272 268 0 286 343 311 313 30 0 238 251 230 229 241 237 235 232 235 232 225 233 20 0 220 230 228 220 0 230 241 227 0 228 222 216 225 10 231 234 225 0 231 244 0 232 0 229 229 231 230 0 237 233 241 232 233 0 244

TOTAL OZONE FEBRUARY 1975



								2 /	75	SH									
LATITUDE					EAST	T				L) N (3 I '	TUI	ΡE					ZONAL
	G	20	40	60	80	160	120	146	160	180	200	223	240	260	2 8 6	300	320	340	ME AN
0	0	244	0	0	232	0	229	229	231	230	0	237	233	241	232	0	231	244	233
-10	247	236	237	0	0	234	230	228	226	0	236	252	0	243	233	243	249	0	238
-20	252	234	241	0	245	245	O	237	217	241	240	0	245	245	248	245	0	252	242
-30	O	253	253	249	258	0	251	254	257	259	0	261	243	260	245	0	254	255	253
-40	277	0	272	264	Ü	262	0	271	257	0	274	268	264	287	C	264	261	277	269
-50	307	284	273	275	266	315	306	285	272	260	0	303	289	285	304	0	298	288	288
-60	325	296	294	0	C	339	340	309	319	319	291	278	291	288	272	299	314	309	303
-70	0	0	0	0	0	0	Ü	C	0	0	0	0	285	ΰ	C	٥	O	0	30.7
-80	0	0	0	٥	0	0	0	0	Ú	0	G	0	G	0	Ü	U	0	0	0

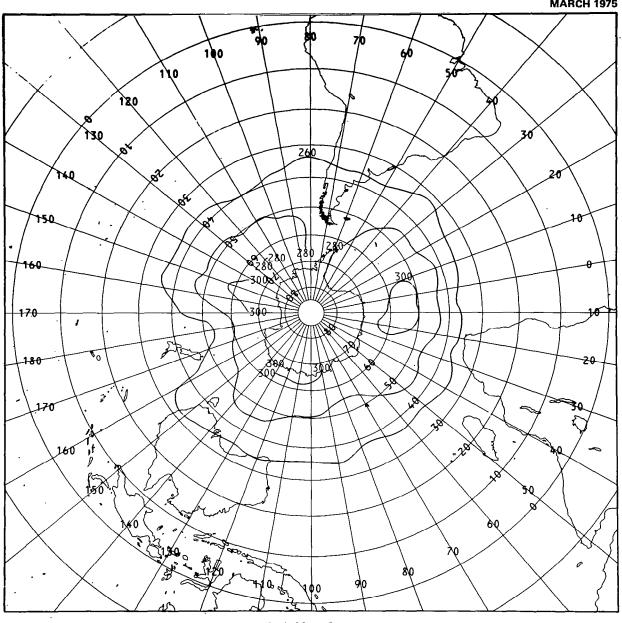
TOTAL OZONE MARCH 1975



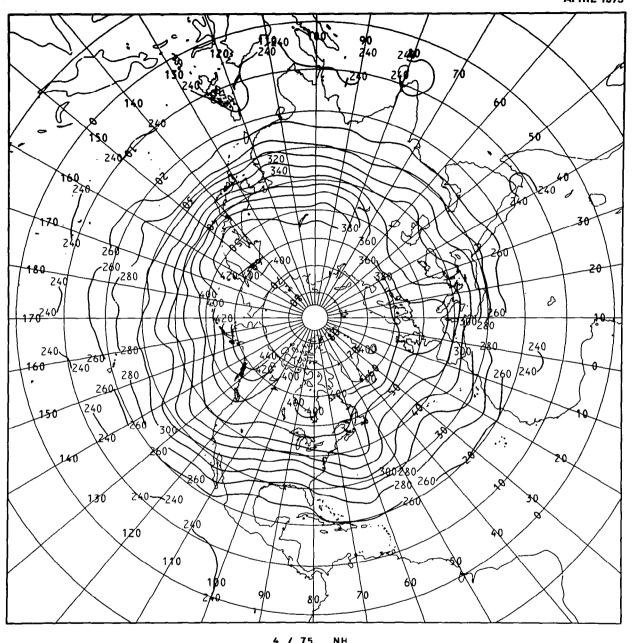
LONGITUDE ZONAL LATITUDE EAST 20 80 100 120 140 160 180 200 220 240 260 260 300 320 340 MEAN 80 0 70 0 60 0 50 0 360 352 378 361 464 458 423 420 384 371 383 397 402 425 393 390 353 390 396 355 369 354 303 338 398 371 365 0 304 346 335 329 C 352 322 324 339 4C 30 0 278 274 248 277 285 292 324 0 270 291 285 300 279 20 241 241 235 247 0 233 236 212 235 257 259 250 0 230 243 254 252 242 10 0 227 233 230 228 0 226 233 232 229 0 232 227 233 233 249 237 232 0 246 241 242 238 0 231 226 235 232 0 234 236 235 236 242 249 248 237



TOTAL OZONE MARCH 1975



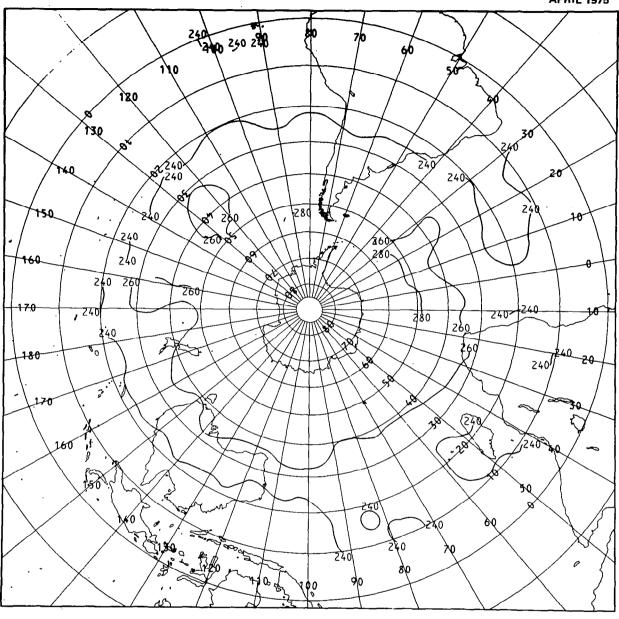
3 / 75 SH **LATITUDE** EAST LONGITUDE ZONAL 80 100 120 140 160 180 200 220 240 260 280 300 320 340 MEAN 0 246 241 242 238 0 231 226 235 232 0 234 236 235 236 242 249 248 237 0 227 234 238 238 -10 0 236 231 0 235 232 239 250 0 237 0 246 240 239 238 -20 0 237 234 236 241 U 246 238 240 247 239 0 248 0 243 253 239 252 -30 0 251 256 259 247 0 253 248 251 252 0 249 252 250 -40 263 258 275 272 261 260 273 266 268 0 281 270 266 264 287 272 270 266 265 -50 330 336 286 263 269 281 287 282 252 269 281 286 280 275 267 283 280 307 329 306 -60 0 284 320 322 281 302 322 0 247 309 277 264 264 291 -70 Û J 287 C 0 0 O D Ü 0 0 C 286 -80 0 Ü D C 0 O e 0



								4 /	15	NH									
LATITUDE					EAS	Γ				L	3 N E	G 1	ru	DΕ					ZONAL
	0	20	40	60	80	100	120	140	160	180	200	220	240	260	28G	360	32¢	340	MEAN
80	0	0	Ú	403	Ü	390	373	O	447	458	444	0	433	445	G	Û	Ū	C	407
70	0	381	O	C	C	407	0	375	0	O	0	0	433	374	0	35 7	422	394	406
60	418	370	G	334	0	0	o	433	0	0	445	450	9	383	C	٥	0	0	413
50	395	362	342	328	397	424	403	446	0	397	393	340	401	396	406	377	334	352	389
40	368	0	305	323	0	3 59	341	385	356	0	315	366	377	341	35€	362	310	337	345
30	0	285	277	0	274	285	288	284	0	296	308	318	306	0	272	288	245	3Ú 8	291
20	237	244	0	247	246	249	245	C	264	284	256	276	0	244	257	0	251	254	253
10	241	0	236	246	234	239	٥	238	242	244	239	242	234	245	C	241	236	240	241
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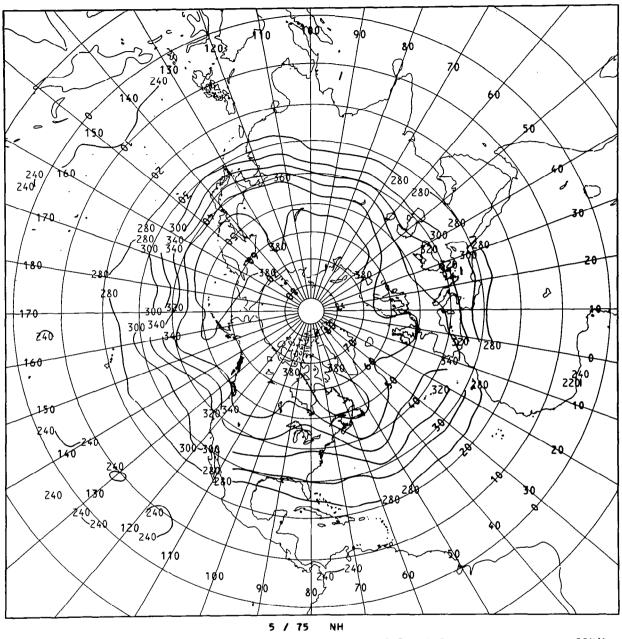


TOTAL OZONE APRIL 1975



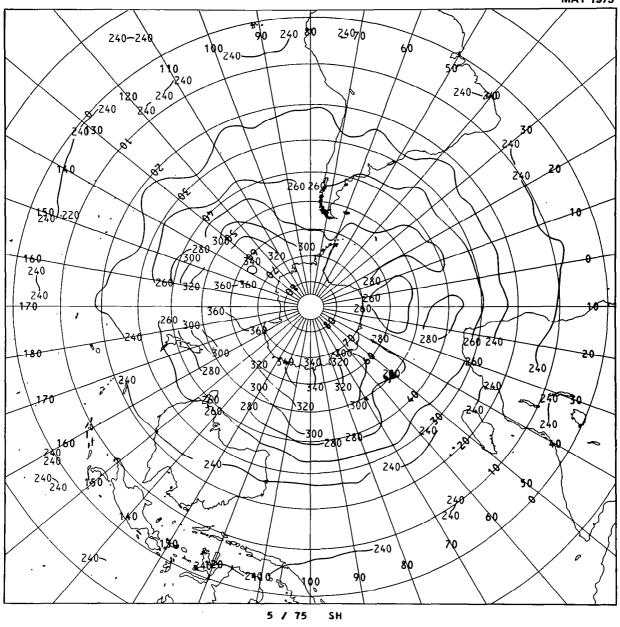
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LATITUDE					EAST	ī				L) N (G I :	T U I	DΕ					ZONAL
	e	20	40	60	80	100	120	140	160	180	200	220	240	260	2 6 0	300	320	340	MEAN
O	٥	249	255	243	244	0	237	239	Ç	239	240	238	236	o	242	239	238	247	241
-10	243	240	0	243	242	235	229	0	229	235	228	233	0	237	230	227	244	0	235
-20	245	9	226	243	242	236	υ	235	236	229	236	229	234	239	0	232	232	237	235
-30	0	246	248	237	249	0	243	254	247	245	0	G	254	0	255	248	246	249	250
-40	263	288	268	251	٥	280	264	269	278	276	267	239	9	287	252	251	255	Ú	263
-50	C	٥	291	287	298	Đ	337	٥	0	0	265	0	o	Ü	254	0	0	298	271
-60	G	0	Q	0	0	0	0	0	٥	0	0	0	0	0	0	0	0	0	293
-70	306	302	G	0	0	0	0	0	0	0	0	0	0	0	254	٥	0	0	291
-80	O	0	0	0	0	0	0	0	Ü	0	٥	0	٥	0	G	n	0	C	0

TOTAL OZONE MAY 1975

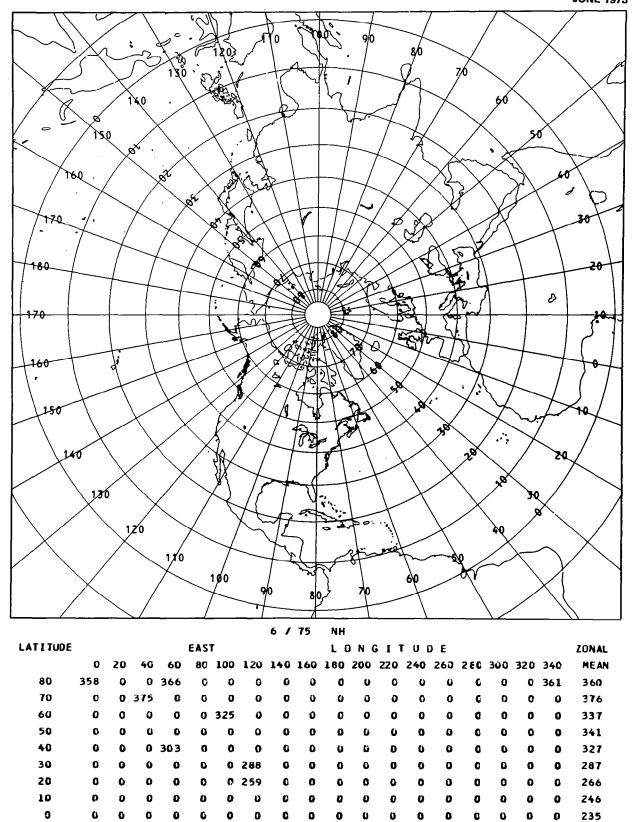


LONGITUDE ZONAL LAT I TUDE EAST 80 100 120 140 160 180 200 220 240 260 280 300 320 340 MEAN 0 396 398 383 384 394 374 387 373 372 385 383 396 390 387 381 393 407 388 80 0 357 374 374 387 352 341 374 367 363 375 388 408 383 387 376 348 400 395 70 372 0 60 369 35C 370 356 326 50 385 337 347 0 393 358 372 398 0 336 341 323 294 370 308 333 334 318 325 334 40 290 0 304 D 294 306 287 326 297 3CC 3L1 3 G 298 288 279 0 276 252 282 3CG 0 279 263 265 G 273 273 254 270 0 263 277 20 249 264 0 265 261 263 262 0 246 248 243 241 C 0 247 265 250 0 250 256 250 0 256 249 10 251 0 0 251 245 239 234 0 243 246 244 244 0 236 234 3 255 245 0 260 0

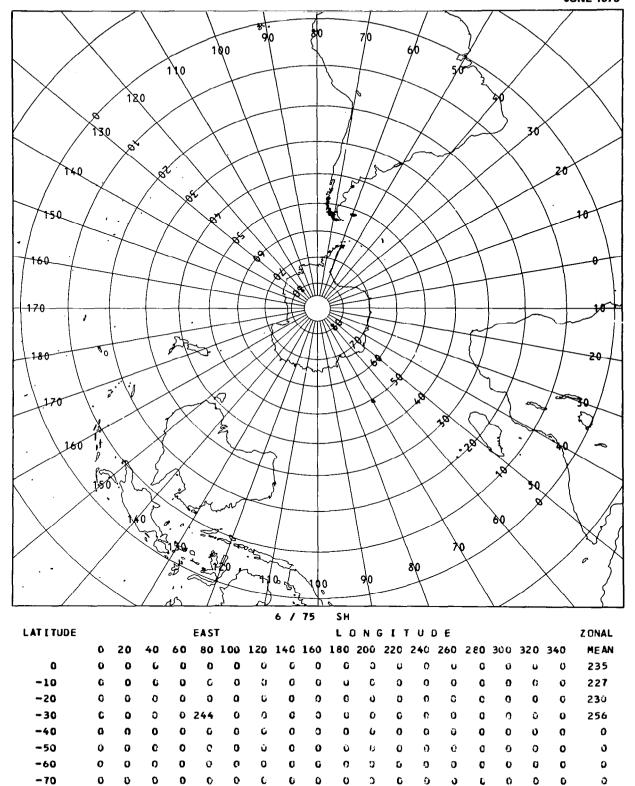
TOTAL OZONE MAY 1975



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LAT I TUDE					EAS	ſ				L) N (; I ;	T U 1) E					ZONAL
	0	20	40	60	80	100	120	140	160	180	200	220	240	260	2 60	30 U	320	340	MEAN
0	0	260	0	G	251	245	239	234	0	243	246	244	244	0	236	234	0	255	245
-10	236	246	0	242	235	233	239	237	228	230	0	235	236	237	230	0	232	245	234
-20	222	٥	232	229	0	228	213	236	235	0	236	231	235	0	G	239	235	238	230
-30	G	246	249	٥	239	248	244	247	G	239	253	261	241	0	255	239	0	253	251
-40	0	0	0	0	٥	0	0	0	0	0	0	0	0	0	0	U	Ç	Ú	256
-50	C	0	0	C	٥	Ú	0	0	0	C	0	0	0	o	0	Ú	0	0	0
-60	0	0	9	0	0	0	0	G	0	O	٥	0	0	0	C	0	0	0	0
-70	0	0	0	0	0	0	0	C	0	0	C	Ú	0	٥	C	0	0	0	0
-80	Q	0	0	0	0	0	0	C	0	0	0	O	0	0	C	0	0	0	0



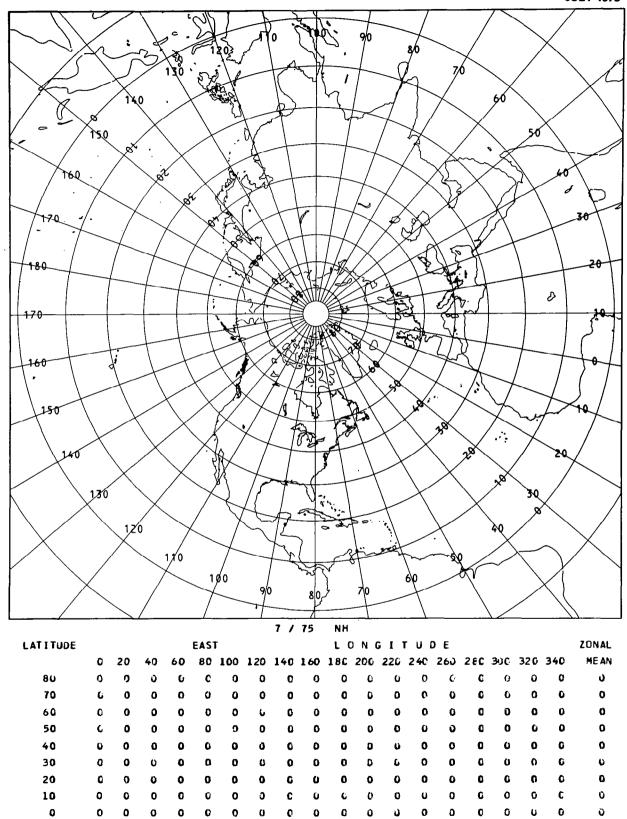
TOTAL OZONE
JUNE 1975



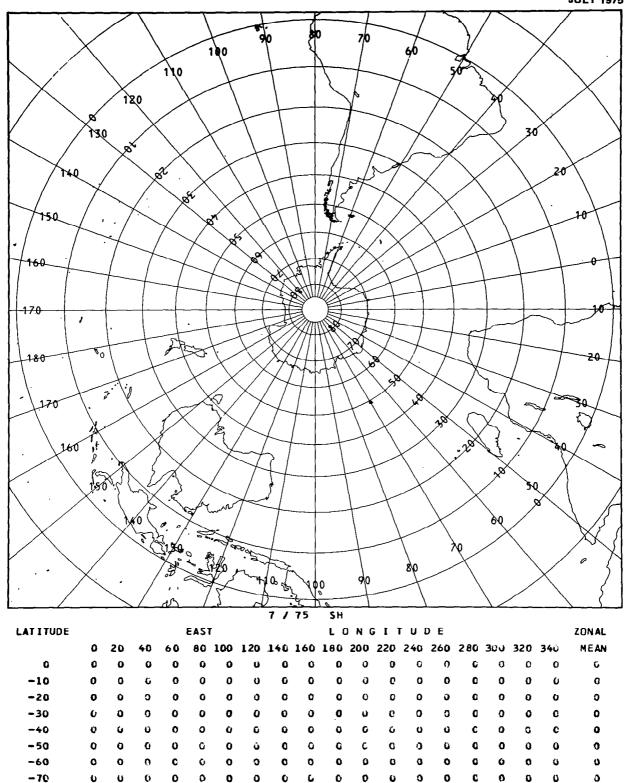
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TOTAL OZONE JULY 1975



TOTAL OZONE JULY 1975



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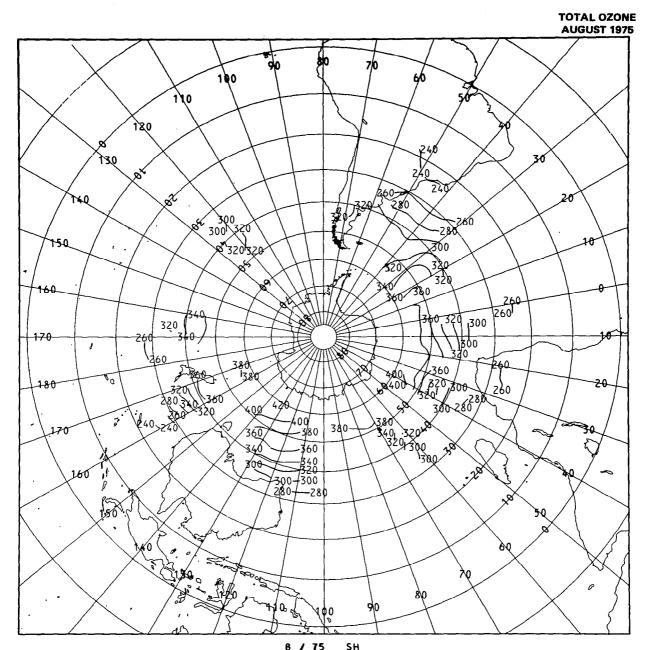
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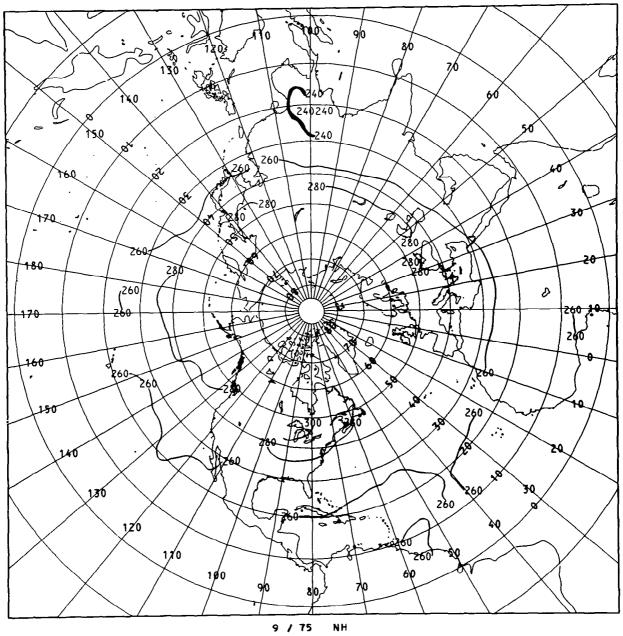
TOTAL OZONE AUGUST 1975 240 240 Ŕ 760 D 140 ×× 130 260 120 1Ø0 40 **رو08**

								_	/										
								8 /	75	NH									
LATITUDE					EAS	ī				L	O N	G I :	TU	DE					ZONAL
	0	29	40	60	80	100	1 20	140	160	180	200	220	240	260	2 6 0	300	320	340	MEAN
80	0	0	0	0	O	0	o	C	G	0	o	0	ō	Ö	0	0	o	Ŀ	272
70	C	0	ū	0	Ú	0	3	0	0	Ú	C	0	o	O	284	o	0	O	290
60	C	0	0	0	0	D	0	C	0	Đ	0	0	0	٥	0	D	C	0	318
50	O	0	296	0	0	0	0	288	276	0	٥	0	0	3	G	361	318	294	295
40	G	273	0	0	Ö	0	Ü	0	0	0	0	276	0	٥	C	Q	Ü	302	281
30	0	0	0	260	G	0	C	C	0	251	265	250	0	0	C	274	0	O	261
20	0	254	248	0	O	0	251	25 0	254	248	250	254	Ö	o	276	258	266	0	254
10	257	25 7	O	C	G	242	244	G	247	250	0	259	٥	0	258	250	257	C	255
0	264	0	ວ	Ü	Û	243	Ü	0	252	249	ū	0	3	0	c	254	259	259	254



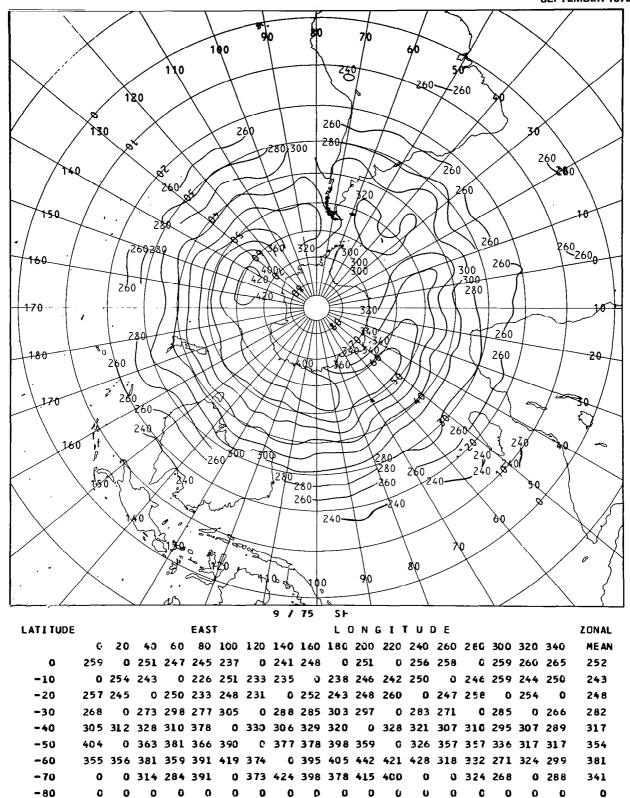
									• •	311									
LATITUDE					EAST	ľ				LC) N (3 1 1	្រែ	E					ZONAL
	0	20	40	60	80	100	12G	140	160	180	200	220	240	260	280	360	320	34L	MEAN
C	264	0	0	0	0	243	Û	0	252	249	0	٥	0	٥	0	254	2 5	259	254
-10	0	248	0	242	0	0	238	C	221	233	0	0	0	0	0	237	235	244	236
-20	242	241	247	237	0	228	237	c	227	231	0	Q	0	Q	Q	251	248	O	238
-30	273	0	252	0	266	267	D	C	246	278	0	0	271	0	256	243	Ü	0	266
-40	9	0	0	263	327	0	352	Ú	364	374	0	329	315	349	3 5 C	0	298	303	321
-50	O	0	364	0	Ú	0	374	378	376	368	362	C	334	0	C	297	0	376	357
-60	419	440	409	0	447	0	401	469	O	0	398	0	0	٥	0	٥	361	. 0	386
-70	331	Ü	0	0	0	464	0	C	O	39 0	Q	0	0	275	2 E C	O	299	31 2	340
-80	G	Ú	0	0	з	0	0	c	0	C	0	O	9	0	C	3	0	0	O

TOTAL OZONE SEPTEMBER 1975

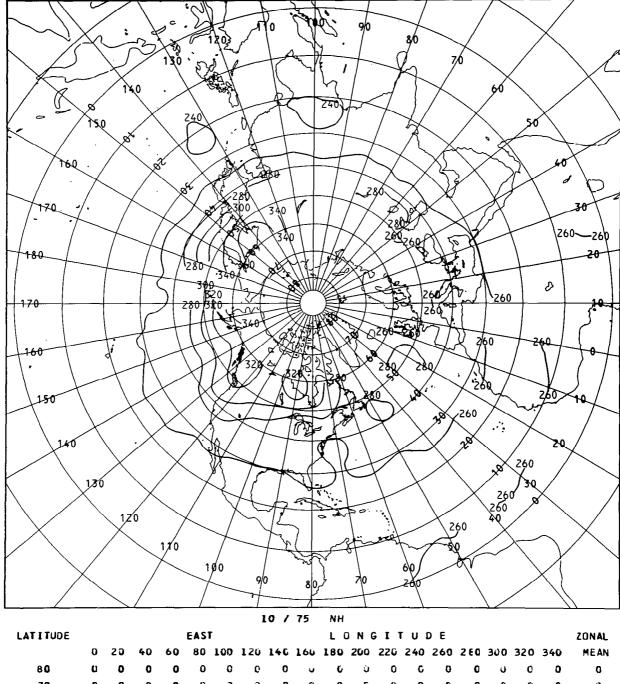


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LATITUDE					EAST	F				L) N (5 I 3	TU	D E					ZONAL
	0	20	40	60	80	100	120	14C	160	180	200	220	246	260	2 8 0	300	32 0	340	ME AN
80	0	0	0	0	0	0	0	C	0	0	0	0	0	0	0	0	Ç	Q	0
70	0	0	0	0	C	0	C	G	0	0	٥	0	0	o	C	0	δ	O	O
60	0	0	0	0	0	0	٥	C	0	0	٥	0	0	0	C	C	C	0	0
50	0	0	0	0	291	0	0	280	0	0	0	304	274	0	0	0	263	0	294
40	279	281	283	286	269	253	259	252	258	294	0	274	267	271	283	0	270	270	273
30	264	0	253	250	260	238	٥	249	261	0	262	277	273	272	G	266	272	26C	260
20	0	252	247	e	241	249	246	248	0	257	270	251	246	0	267	255	262	262	252
10	255	249	0	252	240	245	245	G	251	256	241	239	0	258	254	255	260	0	249
0	259	0	251	247	245	237	٥	241	248	0	251	0	256	258	0	259	260	265	252

TOTAL OZONE SEPTEMBER 1975

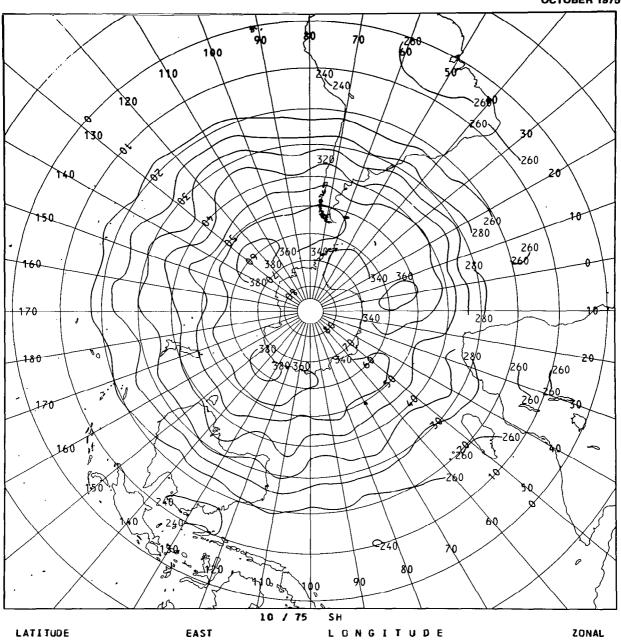


TOTAL OZONE OCTOBER 1975



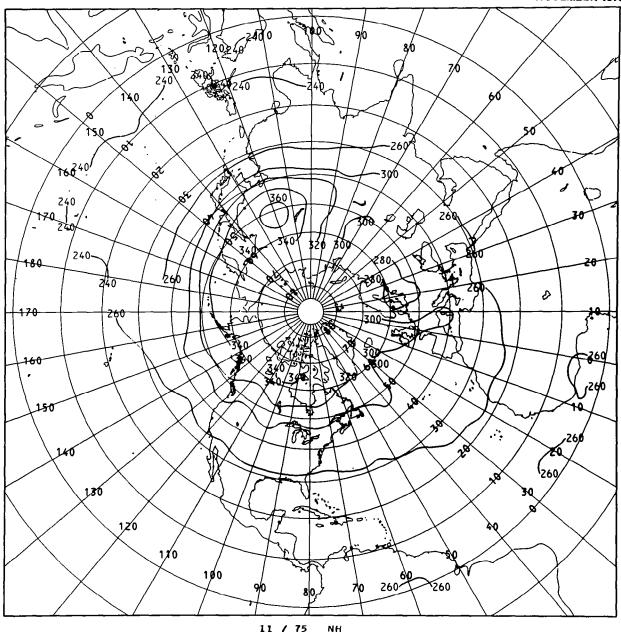
LATITUDE					EAS	T				L () N (3 I ·	T U I	DE					ZONAL
	0	20	40	60	80	100	120	146	160	180	200	226	240	260	2 € 0	300	320	340	MEAN
80	U	٥	0	0	٥	0	O	0	U	Ü	ن	0	C	0	0	Ü	O	0	0
70	G	0	0	0	0	o	9	٥	0	0	O	O	0	G	0	0	O	C	o
60	253	0	227	0	O	n	320	376	323	C	365	318	330	323	257	0	G	284	315
50	0	0	239	318	0	0	0	348	322	0	329	269	327	0	311	284	252	300	299
40	0	249	J	282	275	255	276	317	291	G	252	265	299	257	263	260	275	249	273
30	0	258	257	248	258	241	247	247	243	256	268	267	261	264	277	261	262	0	257
20	254	247	243	0	242	236	237	246	244	253	253	257	253	240	250	256	251	248	246
10	267	260	υ	256	252	247	239	257	244	250	255	248	252	245	246	251	256	O	251
0	264	264	263	259	252	246	٥	245	251	255	251	252	255	255	0	260	263	261	255

TOTAL OZONEOCTOBER 1975



LATITUDE					EAST	r				L	3 N G	3 I I	rui	D E					ZONAL
	0	20	40	60	80	100	120	146	160	180	200	220	240	260	2 8 0	300	320	340	MEAN
0	264	264	263	259	252	246	0	245	251	255	251	252	255	255	G	260	263	261	255
-10	264	266	261	258	236	245	239	241	252	245	248	249	246	233	241	250	260	253	248
-20	266	264	273	269	252	260	261	0	254	256	265	244	262	263	245	257	249	256	257
-30	290	Ü	283	279	286	277	283	305	292	282	292	288	305	30 3	2 8 0	284	271	291	29 0
-40	0	O	341	295	317	309	306	324	315	314	272	323	324	359	315	294	337	349	321
-50	389	306	323	339	393	332	0	374	368	342	335	350	362	353	333	346	353	356	349
-60	30 Z	312	348	367	283	318	389	390	363	372	338	386	401	393	370	343	296	331	365
-70	331	Ü	321	377	275	355	360	420	339	348	452	442	390	306	341	36 8	339	303	348
-80	0	0	0	D	0	0	Ü	0	0	0	o	O	C	0	0	0	c	0	0

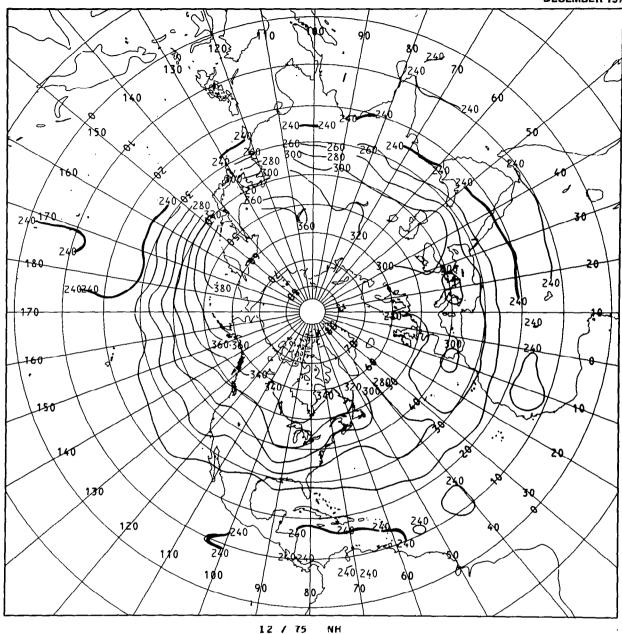
TOTAL OZONE NOVEMBER 1975



								11/	15	MH										
LATITUDE					EAS	T				L	NC	G T	T U	DE					ZONAL	
	O	20	40	60	80	100	120	140	160	180	200	220	240	260	260	300	320	340	MEAN	
80	Ü	0	0	C	J	0	O	C	0	0	Ü	0	ı	0	C	0	0	C	n	
70	0	0	0	0	ı	O	Ū	Ū	Ū	O	ί	ប	C	0	C	0	O	0	0	
60	292	0	0	284	283	330	0	0	Ú	382	343	0	324	350	35C	328	290	292	322	
50	316	294	292	0	G	342	396	347	332	0	327	258	320	332	255	312	321	257	316	
40	0	301	305	0	309	٥	322	304	276	Ü	273	279	288	Q	251	276	285	272	289	
30	290	267	256	250	O	244	252	243	239	O	269	248	239	256	252	259	260	0	255	
20	251	240	240	0	242	225	237	246	ü	242	242	Ú	238	247	243	249	C	260	243	
10	259	257	0	0	245	0	244	G	226	241	258	242	245	248	242	267	249	261	246	
0	258	0	258	0	C	247	243	238	236	c	252	249	248	246	a	260	257	264	250	

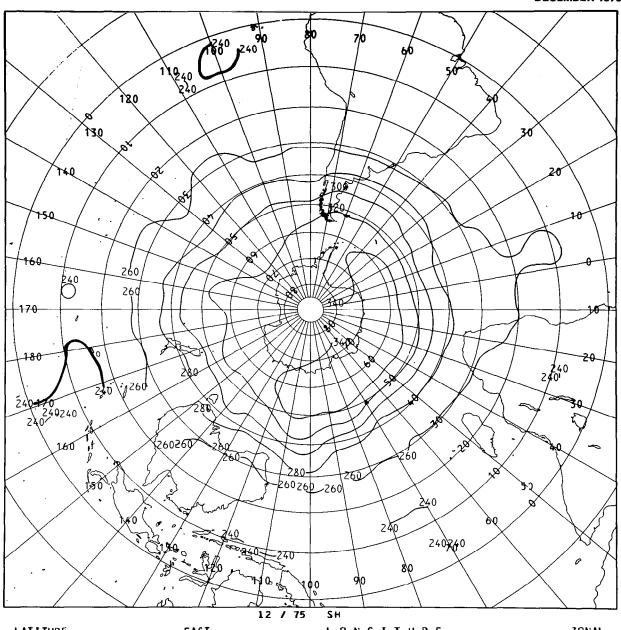


LATITUDE EAST LONGITUDE ZONAL 80 100 120 140 160 180 200 220 240 260 260 300 320 340 0 40 MEAN 0 258 0 258 0 247 243 238 236 ¢ 252 249 248 246 C 260 257 264 250 -10 261 261 269 0 243 252 246 247 255 242 245 0 241 244 246 250 0 254 250 -20 267 257 0 278 255 263 251 227 263 248 0 245 241 260 250 0 257 266 257 -30 272 267 292 296 0 287 256 279 291 0 269 281 272 C 278 275 267 278 0 309 333 294 303 328 294 292 322 299 -40 0 299 297 0 277 306 312 312 300 -50 0 320 327 310 324 310 342 328 326 301 325 326 326 305 369 350 355 330 328 -60 383 405 365 358 0 402 374 371 358 349 363 332 328 327 322 269 312 311 352 -70 338 331 368 363 384 339 367 348 370 370 353 322 308 287 301 301 311 307 343 -80 276 284 298 309 341 332 261 0 359 330 381 336 302 348 263 268 277 272 311



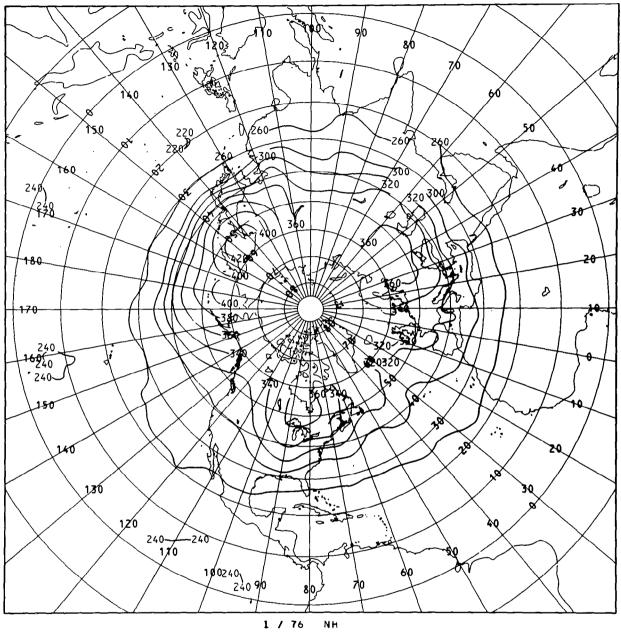
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LATITUDE					EAS	r				L	3 N (G I	r U I	DΕ					ZONAL
	0	20	40	60	80	100	120	140	160	180	200	220	240	260	2 60	30 C	320	340	MEAN
80	0	0	ว	0	o	Ω	Ü	0	0	0	J	0	9	Ú	C	C	C	0	ij
70	0	0	G	0	0	G	o	0	0	0	ø	0	0	O	0	J	0	0	o
60	C	Ü	0	G	Ĺ	0	v	0	C	0	U	0	0	U	0	9	0	0	368
50	266	285	319	320	O	336	404	0	390	348	360	328	325	299	354	325	289	265	329
46	e	322	328	304	304	0	302	0	278	316	301	299	282	0	31C	285	295	292	303
30	283	285	261	258	G	249	246	O	257	255	251	270	0	258	260	268	278	0	264
20	242	232	238	G	240	235	215	0	227	225	240	o	253	234	239	255	0	249	238
10	251	24 4	0	243	225	0	226	0	240	241	3	245	242	241	237	234	239	248	239
0	258	247	243	245	0	238	243	240	241	0	247	248	242	243	244	229	250	O	243





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LATITUDE					EAST	Γ				L	3 N C	3 I I	rυį) E					ZONAL	
	C	20	40	60	83	166	120	140	1 60	180	200	220	240	260	2 & 0	3C 0	320	340	ME AN	
O	258	247	243	245	C	238	243	240	241	0	247	248	242	243	244	229	250	0	243	
-10	260	250	239	0	236	240	ú	244	237	237	245	O	247	244	240	245	0	256	243	
-20	0	255	253	248	251	C	244	246	265	242	Ü	259	251	247	245	Ø	245	253	249	
-30	263	261	260	259	o	281	251	250	254	Ü	270	255	267	261	C	253	254	0	261	
-40	0	28 I	278	351	295	307	294	3ს 6	9	295	279	280	267	O	277	281	282	278	283	
-50	309	325	335	330	0	335	321	318	0	0	316	300	311	309	G	336	301	385	318	
-6G	354	351	342	362	344	346	361	322	345	322	32ú	296	343	328	315	338	350	334	338	
-70	349	348	342	340	334	344	340	320	335	0	321	315	311	321	346	342	333	326	333	
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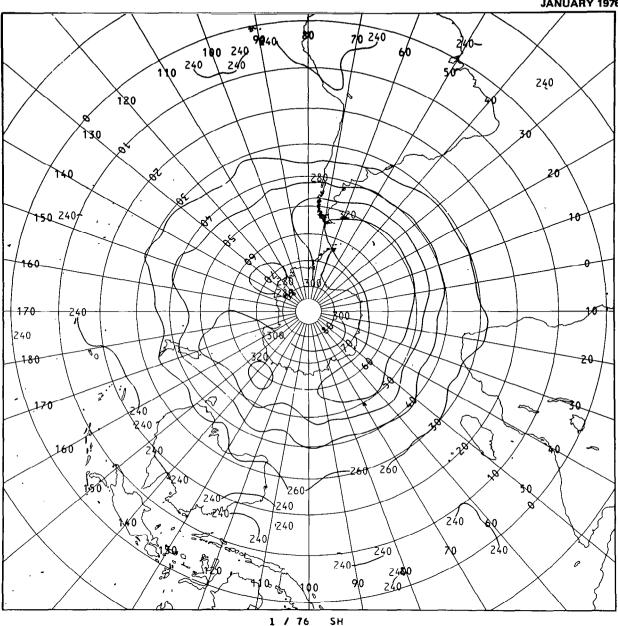
TOTAL OZONE JANUARY 1976



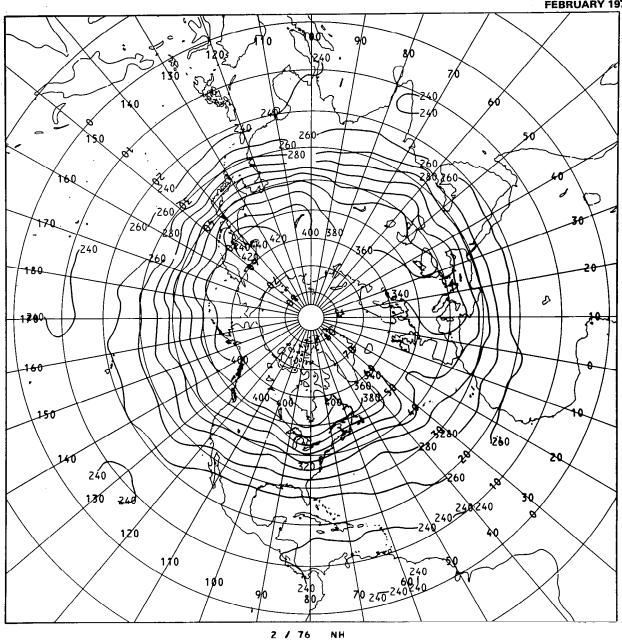
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LAT I TUDE EAST LONGITUDE ZONAL 20 ME AN 80 100 120 140 160 180 260 220 240 260 286 300 320 340 80 0 70 0 60 O 0 328 309 374 0 361 369 0 302 280 364 50 336 384 378 0 336 324 373 347 368 402 354 315 336 349 353 331 277 347 354 40 325 30 272 244 234 239 261 240 231 20 230 210 220 244 242 253 261 251 223 237 266 241 241 10 243 243 237 243 239 0 213 226 227 244 232 240 234 241 236 230 236 243 237 0 251 251 245 241 252 237 231 235 239 240 244 241 246 238 245 241 242 252 243

TOTAL OZONE JANUARY 1976

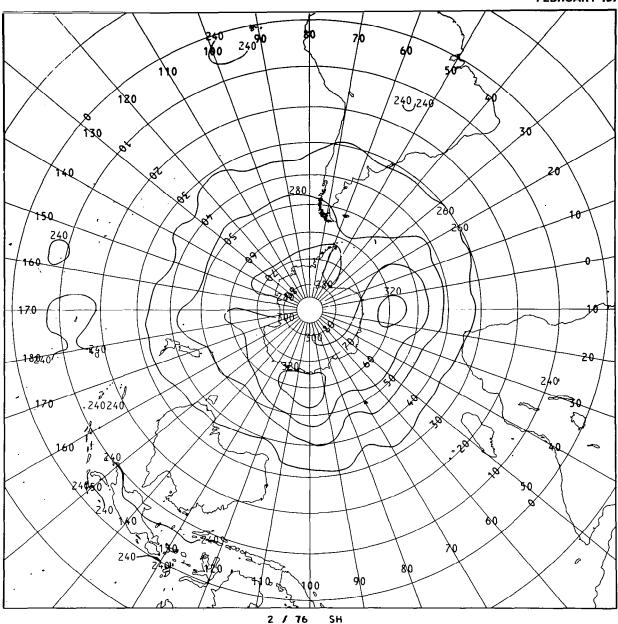


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LATITUDE					EAST	Г				L) N C	, 1	T U I	DΕ					ZONAL	
	C	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	MEAN	
0	251	251	245	241	252	237	231	235	239	240	244	241	246	238	245	241	242	252	243	
-10	255	256	242	241	241	245	244	227	238	236	241	242	244	242	241	249	262	256	243	
-20	251	247	245	244	٥	251	236	242	236	245	232	246	251	248	247	245	253	258	248	
-30	254	265	258	239	270	268	250	259	241	233	245	254	259	259	252	258	257	0	255	
-40	267	278	266	274	Ü	285	276	0	o	249	271	279	285	300	265	272	271	284	272	
-50	325	290	296	307	329	313	296	270	313	315	301	270	294	287	311	292	358	303	305	
-60	332	337	323	335	329	311	282	328	326	305	277	273	283	299	367	331	341	339	316	
-70	321	31 0	308	314	310	300	3 09	297	294	30 3	291	272	260	3U 2	275	320	323	305	301	
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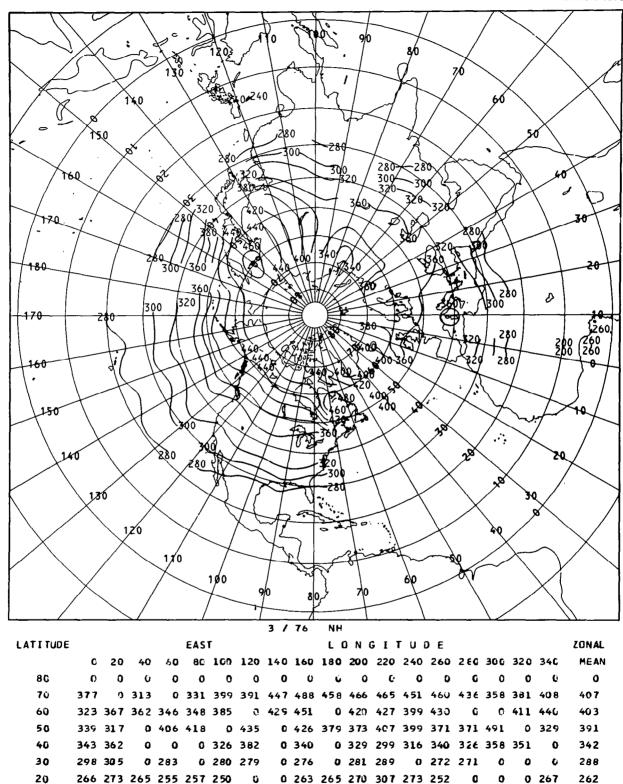


LATITUDE EAST LONGITUDE ZONAL 80 100 120 140 160 260 280 300 320 340 MEAN 0 80 0 0 O 0 370 371 78 353 382 351 0 379 0 284 365 405 359 418 452 384 406 435 382 60 303 350 418 416 407 354 358 0 308 373 50 337 382 400 475 397 410 393 319 367 349 423 375 0 333 40 329 289 360 335 337 O 316 338 388 376 369 380 300 0 275 0 292 278 30 345 280 291 0 294 254 0 266 279 277 261 274 20 0 250 249 249 232 242 243 245 0 260 253 0 261 269 249 267 251 10 0 239 241 0 240 229 228 241 0 244 240 240 241 0 233 237 248 239 0 256 255 253 0 245 242 239 247 0 241 249 245 247 0 244 242 0 251 245

TOTAL OZONE FEBRUARY 1976



								2 /	10	311										
LATITUDE					EAST	r				L) N C	3 I .	rui	3 C					ZONAL	
	0	20	40	6 0	80	100	120	14C	160	180	200	220	240	260	2 80	300	320	346	ME AN	
0	256	255	253	0	245	242	239	247	O	241	249	245	247	С	244	242	0	251	245	
-10	257	240	0	243	245	245	245	239	236	239	0	248	247	246	247	0	257	262	245	
-20	25 Ç	240	250	246	Ģ	244	0	243	237	0	247	249	247	248	C	248	251	C	245	
-30	258	259	253	0	247	2 59	251	251	0	253	261	259	261	o	258	254	O	0	255	
-40	272	272	258	273	0	273	256	261	263	277	264	288	٥	256	270	273	268	C	268	
-50	316	322	291	314	263	341	286	269	ø	399	263	270	292	9	287	268	273	302	288	
-60	328	331	313	307	324	345	324	317	305	329	289	273	288	287	295	292	296	289	304	
-70	30 1	321	324	323	323	0	312	0	317	291	0	275	270	õ	256	274	0	0	294	
-80	292	292	291	286	289	300	297	0	310	303	285	271	263	238	2 € 2	269	294	269	287	



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0 255 249 246 258

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0 269 247 246 248

0 251 239 243 243

0 243 240 242 246

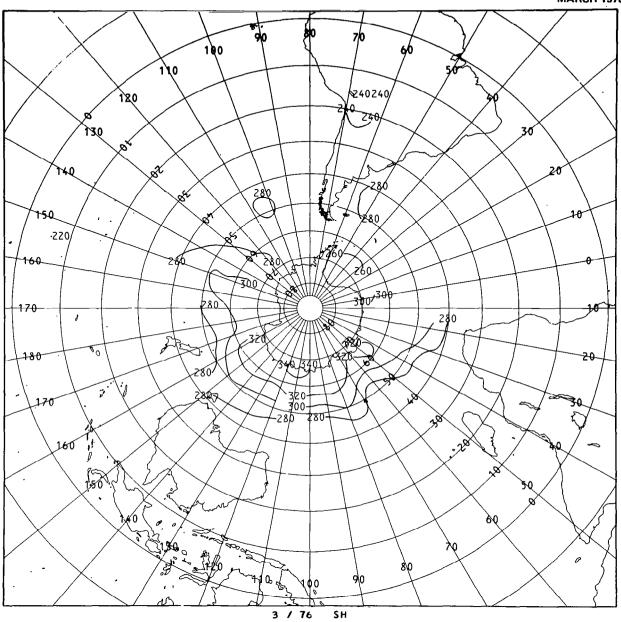
0 240

0 247 245

C 252

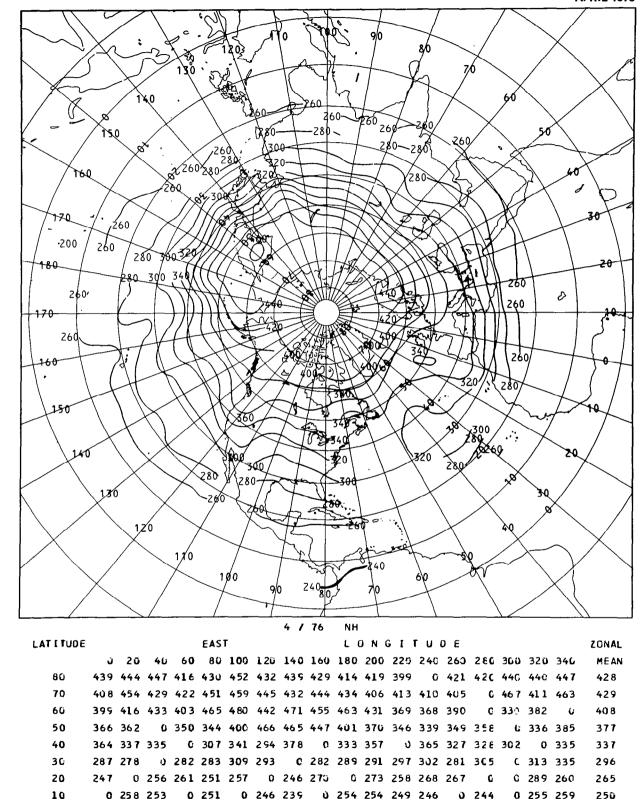
245

TOTAL OZONE MARCH 1976



LATITUDE					EAS	T				L) N (3 I 3	rui) E					ZONAL
	0	20	40	60	86	100	1 20	146	160	180	200	220	240	260	280	30 U	·320	340	MEAN
O	C	258	0	269	247	246	248	e	243	240	242	246	0	247	245	0	0	0	249
-10	0	0	241	258	243	243	O	237	251	0	245	0	238	244	0	24 7	Ü	O	246
-20	0	251	247	C	253	0	242	239	0	238	245	234	247	0	245	255	235	O	244
-30	Ü	248	C	0	287	0	255	252	245	258	0	249	c	257	249	Q	252	259	254
-4C	0	270	250	0	250	0	266	261	υ	273	0	0	276	266	255	268	0	0	266
-50	305	339	0	248	283	296	297	295	0	261	258	274	Ú	300	276	250	Ú	0	280
-60	0	0	٥	364	387	347	2 84	315	289	248	338	320	275	270	265	278	223	O	30 4
-70	0	290	327	312	339	310	388	329	381	336	277	c	275	289	272	249	239	0	300
-80	247	291	266	C	302	278	327	0	Ó	C	254	268	266	251	279	270	243	277	273

TOTAL OZONE APRIL 1976



0 242 243 236 243

0 249 239

C 249 250

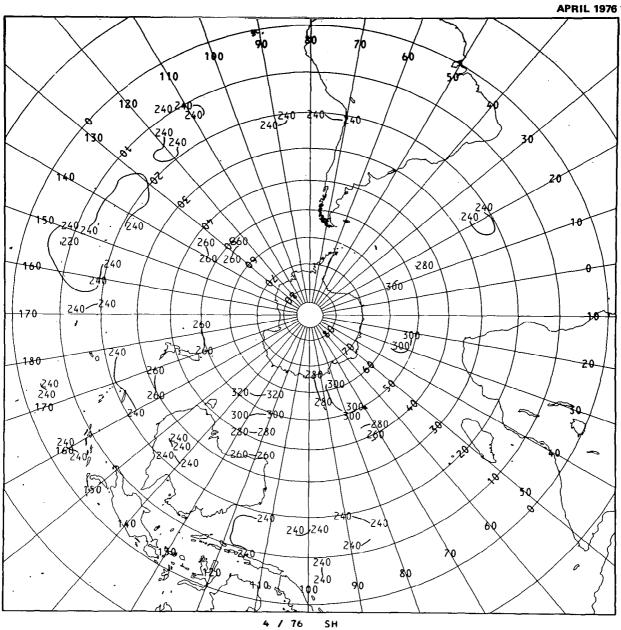
245

0

252 256

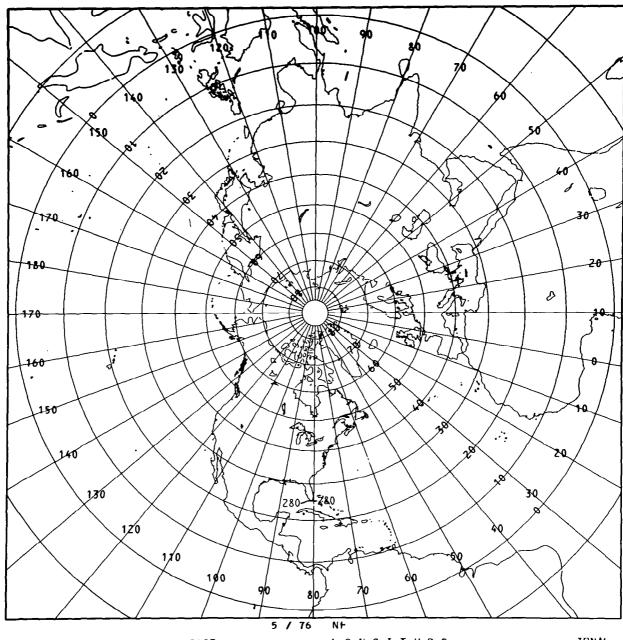
0 259 243 236 238





								7 /	, 0	311									
LATITUDE					EAS	ī				L	אכ	G 1	T U I	DΕ					ZONAL
	Ú	29	40	60	80	100	120	146	160	180	200	22ij	240	260	2 8 0	3 6 0	320	34G	MEAN
0	252	256	Ç	259	243	236	238	0	242	243	236	243	2	249	239	0	249	256	245
-10	253	Ú	251	245	244	235	٥	236	235	0	240	243	243	237	C	254	250	249	243
-20	0	242	250	O	250	237	241	239	0	227	237	242	238	G	247	244	Ċ	237	240
-30	Ü	243	0	C	G	0	251	C	270	0	Ü	264	0	0	247	0	246	C	253
-40	G	G	276	C	241	0	0	0	267	244	Ù	O	254	O	0	G	0	260	262
-50	0	286	Ü	0	289	235	Q	Û	Ù	256	0	263	r	0	0	i)	ü	279	275
-60	C	0	Ú	0	307	0	O	C	0	0	ø	C	0	ø	C	278	c	C	285
-70	C	0	O	Ú	C	0	G	C	J	0	Ũ	0	0	0	G	ø	ũ	Ü	286
-80	0	0	0	C	Ü	0	0	C	Ú	C	Ü	0	٥	O	C	ប	υ	0	0

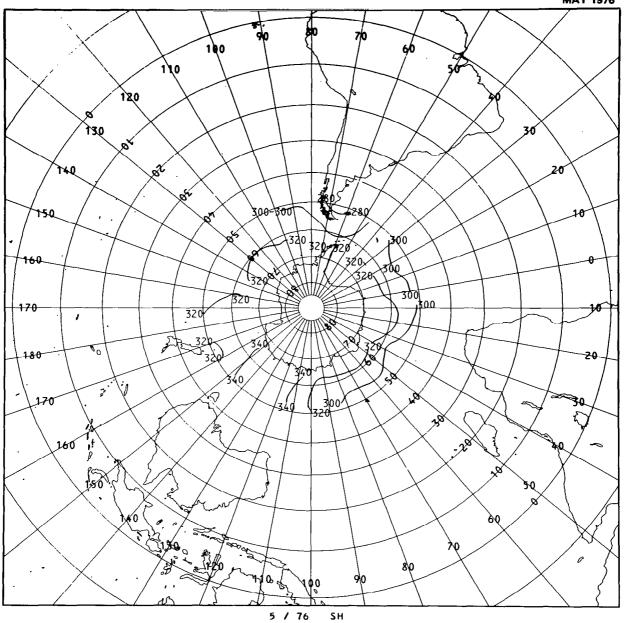
TOTAL OZONE MAY 1976



LATITUDE					EAST	r				L) N (; I ;	гυί) E					ZONAL
	e	20	40	60	80	100	120	140	160	180	20u	220	240	260	2 € 0	300	32 C	340	MEAN
80	40 6	380	379	366	381	362	372	394	386	391	387	413	409	412	411	423	393	497	392
7C	381	393	364	390	40.8	418	424	41 C	415	380	411	393	377	386	420	4v 3	382	391	396
60	381	348	367	356	368	419	398	411	410	0	419	391	U	410	4C3	382	37 7	382	289
5 C	362	357	0	318	340	313	373	371	395	411	410	393	326	364	4 C 4	Ù	383	391	366
40	333	o	329	3C 5	291	328	G	408	379	301	375	õ	312	336	376	33v	Ĺ	348	332
30	299	275	e	287	274	277	288	C	275	276	3	319	343	300	3C1	Ü	299	0	294
20	O	0	õ	265	G	2 59	O	272	Ú	ū	Ü	255			261	288	0	0	269
10	0	0	O	C	254	241	258	255	o	0	O	0	0	υ	256	278	C	0	252
ü	258	ū	ø	0	241	0	237	O	0	0	247	0	Ω	G	235	O	235	0	244

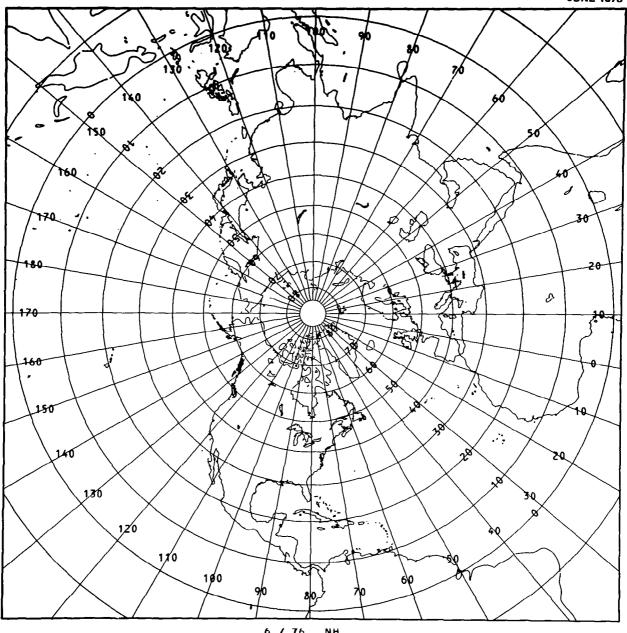


TOTAL OZONE MAY 1976



								, ,		311										
LATITUDE					EAST	Г				LO	NO		T U I	DE					ZONAL	
	0	20	40	60	80	100	1 20	140	160	180	200	220	240	260	28C	3¢ 0	320	340	MEAN	
0	258	C	0	0	241	0	237	C.	٥	0	247	U	C	ა	239	9	235	Ü	244	
-10	c	o	O	C	Ũ	ů	0	c	p	6	245	Ö	0	O	O	Ü	0	3	240	
-20	ð	O	٥	Ç	0	0	Ü	Ŀ	0	C	Ð	G	G	O	O	0	0	Ú	0	
-30	0	ð	G	0	0	0	o	0	o	U	0	U	0	0	G	Ü	Ú	0	0	
-40	0	Ü	Ü	Ü	G	٥	O	C	O	C	0	0	Ü	Ü	C	0	0	C	U	
-50	306	293	255	252	317	318	327	332	310	336	335	Ü	302	291	275	254	0	C	301	
-60	363	343	317	341	335	324	315	C	303	c	321	334	356	333	291	306	321	Q	327	
-70	O	Ü	C	0	0	9	0	G	0	0	C	٥	0	0	o	9	c	Ü	0	
-80	0	0	ი	G	0	0	G	G	0	U	o	o	0	0	G	ú	0	0	0	

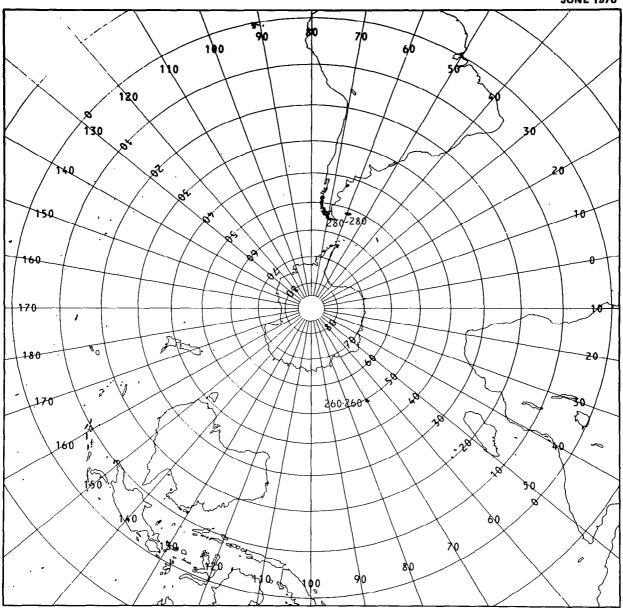
TOTAL OZONE JUNE 1976



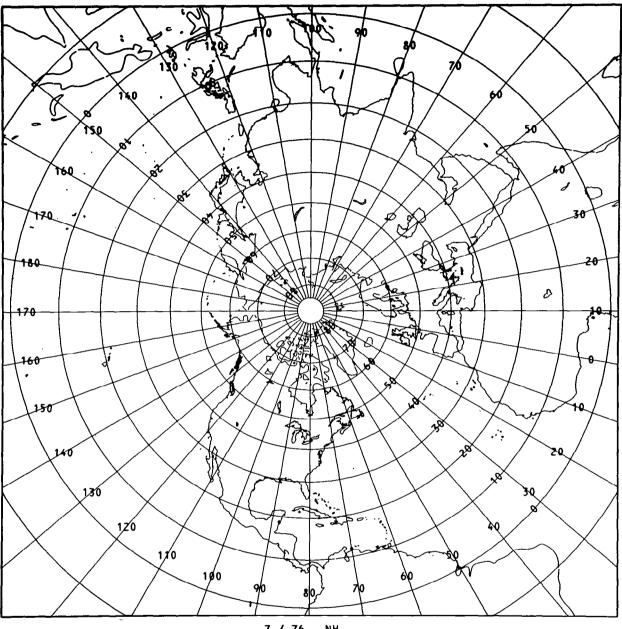
								0 /	10	NH										
LATITUDE					EAST	Г				L) N (3 1 3	r u i	DΕ					ZONAL	
	0	20	40	60	80	100	120	140	160	180	200	22C	240	260	280	30:0	326	340	MEAN	
80	0	٥	0	0	O	e	0	Ü	O	U	9	C	Ú	ι	G	ن	U	O	υ	
70	Ð	O	U	0	0	C	J	Ú	C	Ú	L	Ĺ	0	Ü	C	0	J	C	C	
60	0	0	С	0	0	(r	0	C	Ú	0	ί	Ç	O	340	C	Ü	o	C	336	
50	e	0	Ü	U	3	0	0	0	Ü	Û	C	G	ű	0	C	0	O	0	321	
40	O	U	O	٥	G	O	Э	0	0	0	Ð	0	Ü	0	ί	0	O	0	310	
30	C	0	0	O	Ú	0	0	C	Ü	0	C	O	Ü	0	ü	o	0	0	325	
20	C	0	G	G	O	O	o	0	Ú	O	0	C	G	0	265	0	0	0	264	
10	0	C	0	0	O	0	C	0	O	0	0	ø	Ü	0	253	٥	Ú	0	251	
0	0	0	0	0	0	0	0	G	ũ	a	0	0	0	0	0	ø	U	0	250	



TOTAL OZONE JUNE 1976



								6 /	76	SH									
LAT I TUDE					EAST	ľ				L) N (; I ;	r u i	ЭЕ					ZONAL
	G	20	40	60	80	100	1 20	140	160	180	20G	2 20	240	260	260	330	320	340	ME AN
o	C	0	3	0	Q	o	0	0	0	0	ú	υ	0	э	C	0	G	0	250
-10	o	3	O	O	O	Ú	v	0	9	0	Ü	Ú	O	U	C	0	0	Ú	256
-20	0	0	0	0	0	0	Ü	0	Ü	O	0	0	0	0	O	0	0	0	26ა
-30	0	0	0	0	0	0	0	0	0	0	Ð	0	0	Ü	0	ú	G	0	287
-40	C	٥	o	227	239	0	ð	0	0	0	0	0	339	30 7	C	0	0	0	282
-50	C	0	٥	0	234	G	322	C	O	Ü	C	0	э	313	367	288	0	36 7	295
-60	0	٥	343	0	č	C	343	0	G	C	379	0	c	0	G	0	324	0	319
-70	0	٥	0	0	0	0	ŭ	C	0	0	Ç	೭	C	3	C	0	0	O	0
-80	C	0	0	0	C	0	0	G	0	0	D	0	3	0	Ü	.)	0	C	0

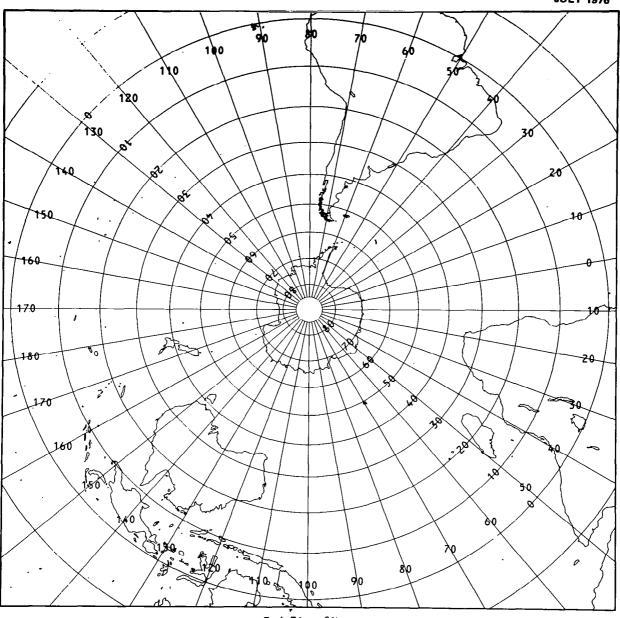


								7 /	76	NH									
LAT I TUDE					EAS	r				L) N (3 I '	TUI	DΕ					ZONAL
	0	20	40	60	80	100	120	140	166	180	500	220	240	260	280	300	320	340	MEAN
80	Ú	0	0	0	Ü	O	O	C	0	G	D	Ü	0	0	C	0	0	O	n
70	0	0	9	0	0	0	0	٥	0	្រប	ø	۵	0	D	0	0	Ø	O	O
60	0	0	0	G	0	O	0	C	0	0	G	0	0	9	0	O	0	٥	C
50	O	0	0	0	0	0	Û	0	٥	0	0	Ú	0	Ü	0	0	0	U	C
40	C	Ü	0	O	Ü	0	•	C	U	0	0	G	0	C	C	O	C	C	O
30	C	0	0	0	0	Đ	9	C	Ð	٥	٥	Û	Ü	Ď	ί	0	0	0	O
20	C	0	0	O	O	0	0	0	0	0	0	0	0	n	0	0	C	G	0
10	0	0	0	0	Э	0	o	C	0	0	0	0	0	0	0	0	0	U	υ
o	ú	0	0	0	Ü	0	υ	Ü	U	C	Ü	C	Ú	Ú	C	Û	0	0	O

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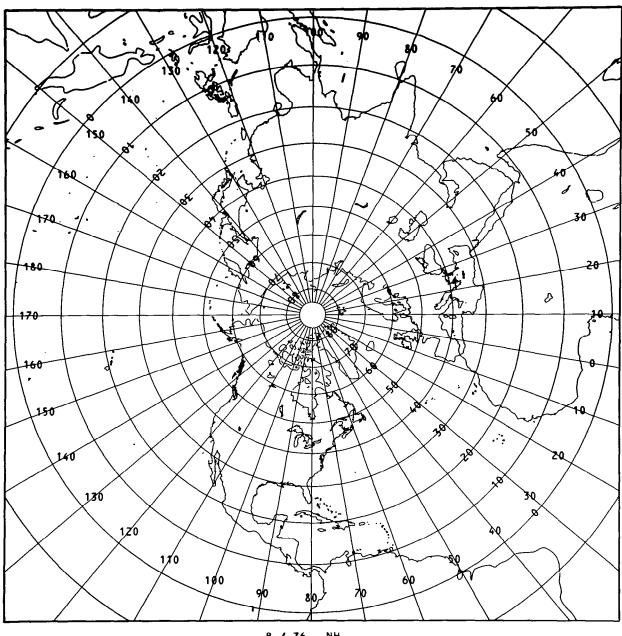


TOTAL OZONE JULY 1976



								7 /	76	SH									
LAT ITUDE					EAST	Γ				L) N (1 6	TU	DΕ					ZONAL
	ប	20	4ū	60	80	100	120	140	160	180	200	220	24û	260	280	30 G	320	340	MEAN
O	C	0	Ü	0	٥	8	Ú	c	Ü	C	٥	C	0	¢	C	Ð	0	C	ð
-10	O	ð	Ü	Ċ	Ü	Ü	ú	G	0	O	O.	ß	C	1)	C	O	G	C	0
-20	0	0	0	0	C	0	e	C	0	C	C	C	O	0	£	0	9	0	υ
-30	C	G	Ú	O	ŷ	0	IJ	G	o	0	0	Ü	0	O	C	o	0	ø	0
-40	C	0	0	O	O	0	U	6	0	O	0	O	0	0	C	0	0	Ú	0
-50	Ü	Ú	0	0	Đ	0	O	C	Ü	0	0	0	0	0	C	Ü	0	C	o
-60	C	0	0	0	0	0	O	0	O	0	O	0	0	0	0	O	٥	G	٥
- 70	0	Ü	o	0	0	0	0	O	0	G	0	0	0	ð	C	0	0	O	G
-80	C	0	Ü	0	0	0	3	Ú	Ü	Ü	0	Ü	0	0	o	ŋ	O	0	IJ

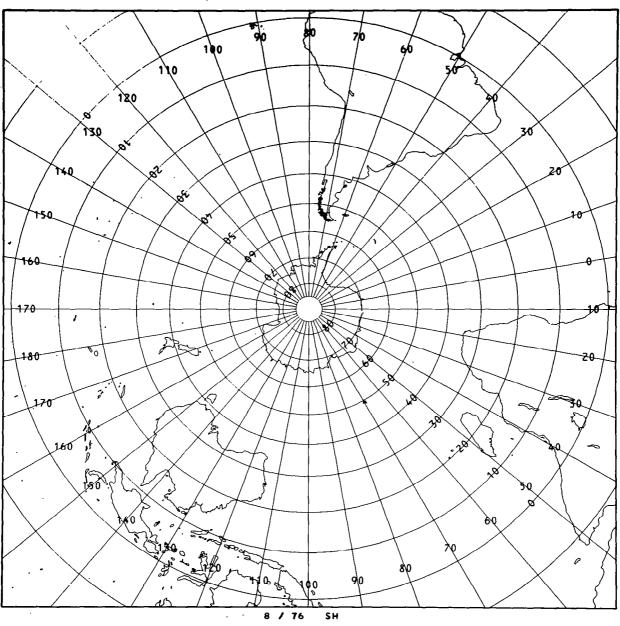
TOTAL OZONE AUGUŞT 1976



								8 /	76	NH									
LATITUDE					EASI	Γ				LO	NO	, i	l n i) E					ZONAL
	O	20	40	6 C	86	100	120	140	160	180	200	220	240	260	280	300	320	340	MEAN
80	0	0	O	o	0	0	0	O	0	0	0	0	9	O	C	Ü	0	O	o
70	0	0	O	0	ស	O	Э	C	0	0	Ü	٥	S	0	0	Û	0	G	o
60	G	0	0	G	ŭ	0	0	0	0	0	0	0	0	0	٥	o	c	0	0
50	0	0	O	0	o	۵	۵	0	Ö	0	C	0	0	Ü	G	o	0	0	0
46	G	٥	0	0	Ü	٥	o	C	0	0	U	Ü	0	0	ű	Ó	0	0	Ü
30	0	U	o	0	0	o	٥	C	٥	6	G	0	٥	0	280	0	0	0	280
20	C	0	O	0	0	0	0	0	0	0	ε	0	Ü	0	0	C	o	0	264
10	O	o	0	۵	C	٥	ũ	0	0	0	υ	0	0	0	0	244	O	0	256
O	C	0	0	0	Ü	Ö	0	0	o	C	0	O	0	0	C	247	G	0	253

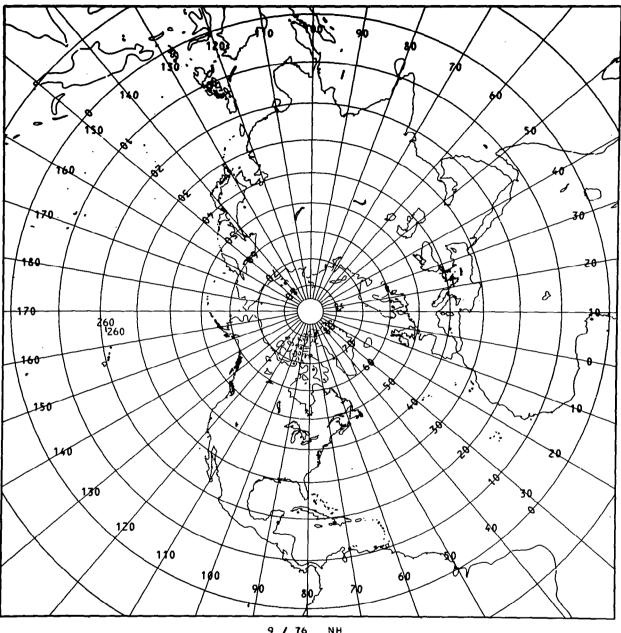
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TOTAL OZONE AUGUST 1976



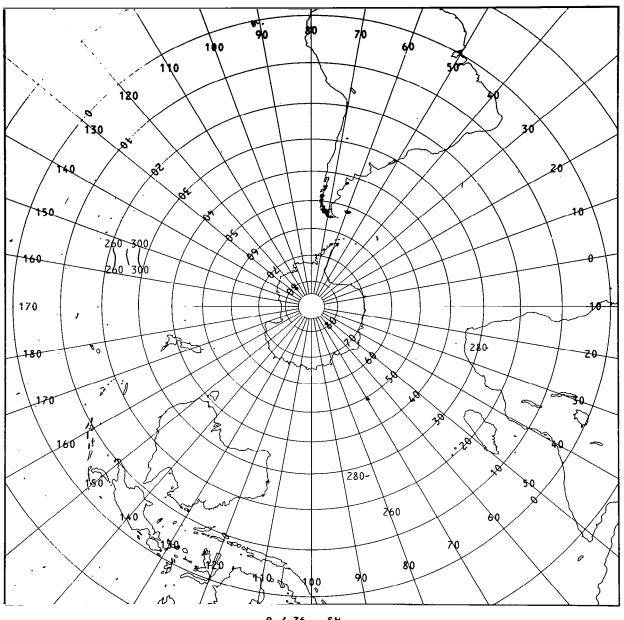
•							-	8 /	76	SH									
LAT I TUDE					EAS	Ī				L) N (3 1 .	TU	DE					ZONAL
	Û	20	40	60	80	100	120	14C	160	180	260	220	240	260	2 & G	300	320	340	MEAN
0	C	0	J	0	0	0	0	C	0	C	0	C	0	0	C	247	0	C	253
-10	0	٥	0	0	O	J	ა	C	0	0	ű	0	0	O	ũ	257	0	C	256
-20	C	0	0	0	0	0	O	0	0	C	0	0	0	Ø	C	0	0	٥	0
- 30	0	0	C	0	a	a	0	0	O	0	0	0	a	0	Q	0	U	G	O
-40	C	0	0	0	O	0	0	C	0	0	ن	0	٥	0	0	0	0	C	0
-50	J	0	0	O	0	0	C	0	0	C	o	C	U	O	6	0	٥	0	0
-60	C	0	0	0	C	0	0	C	0	0	ũ	0	0	0	C	C	0	0	0
-70	C	0	ij	0	G	0	G	C	G	0	0	G	0	3	O	0	0	0	0
-80	G	0	0	0	e	0	Ģ	0	0	0	Ú	Ú	G	0	G	0	Ü	0	0

TOTAL OZONE SEPTEMBER 1976

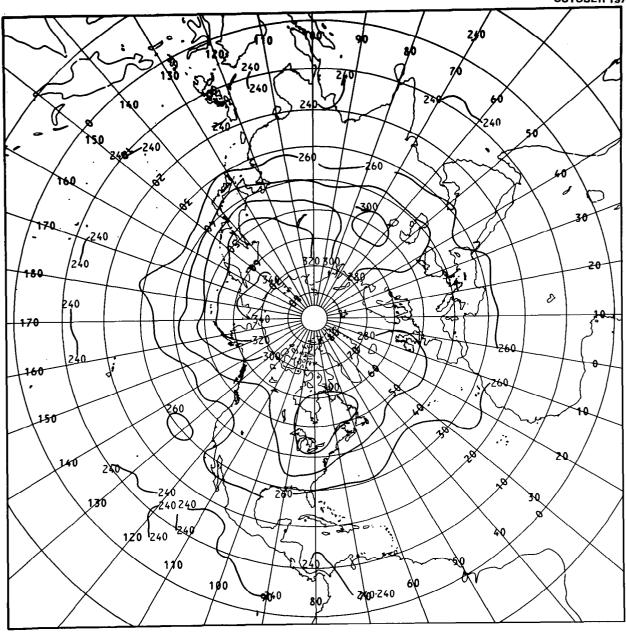


								9 /	76	NH									
LATITUDE					EASI	Γ				L) N C	G I 1	r u i	E					ZON AL
	Đ	20	40	60	80	100	120	146	160	180	200	220	240	260	280	300	320	34ú	MEAN.
80	Ü	0	Q	0	Ŀ	0	Ü	C	C	G	J	0	o	9	C	Ü	Ð	e	256
70	288	0	0	C	٥	G	0	C	0	0	0	3	0	9	C	C	o	C.	290
60	٥	၁	o	O	0	0	0	262	0	0	5	0	0	0	C	ŋ	C	õ	271
50	ø	306	n	C	0	0	Ü	C.	0	C	Э	ຍ	ΰ	Đ	G	Ü	Ú	o	317
40	0	0	0	C	G	٥	O	0	0	O	Ö	278	0	0	0	0	Û	Ü	280
30	274	ø	0	0	0	0	9	256	0	0	ti	ß	0	C	C	0	0	C	268
20	G	0	ø	0	C	0	٥	255	0	0	G	0	0	257	C	264	2 63	O	259
10	C	260	0	0	251	O	O	£	239	Ð	υ	O	ð	255	0	269	259	Đ	251
0	Ğ	258	ð	0	232	C	0	Ċ	237	G	241	O	Ú	241	C	· o	254	9	246

TOTAL OZONE SEPTEMBER 1976

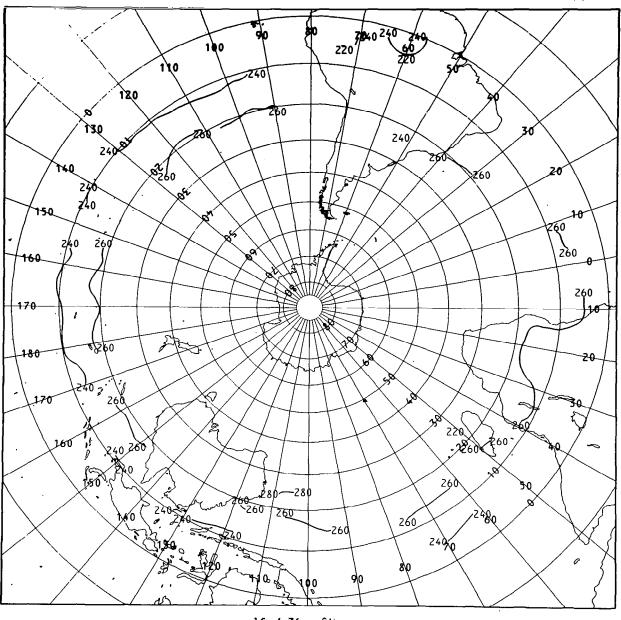


								9 /	76	SH									
LAT I TUDE					EAST	ī				LO	N	3 1 3	T U I	ΡE					ZONAL
	0	20	40	60	80	100	120	14C	160	180	200	220	240	260	260	3C G	32 û	340	MEAN
0	0	258	Ö	0	232	C	Ü	0	237	C	241	Ü	9	241	C	0	254	0	246
-10	O	259	266	0	250	0	Ü	C	0	O	241	C	C	O	c	o	r	G	251
-20	0	0	283	0	267	9	0	C	0	C	J	C	O	G	c	Ü	e	264	265
-30	0	0	e	0	309	0	0	C	0	C	0	G	၁	0	C	301	0	281	295
-40	0	310	0	0	U	O	0	0	٥	a	0	0	0	o	0	o	0	C	316
-50	Ģ	0	0	Đ	ü	0	Ü	0	0	Ü	0	0	Ü	ð	G	O	٥	э	396
-60	0	0	O	0	0	0	O	C	O	0	0	0	G	Ú	C	0	Ü	0	420
-70	C	0	288	O	ø	9	э	C	٥	۵	Ċ	C	o	0	8	O	٥	a	299
-80	G	0	r	0	U	0	Э	284	287	0	0	0	3	0	G	ა	٥	ð	284



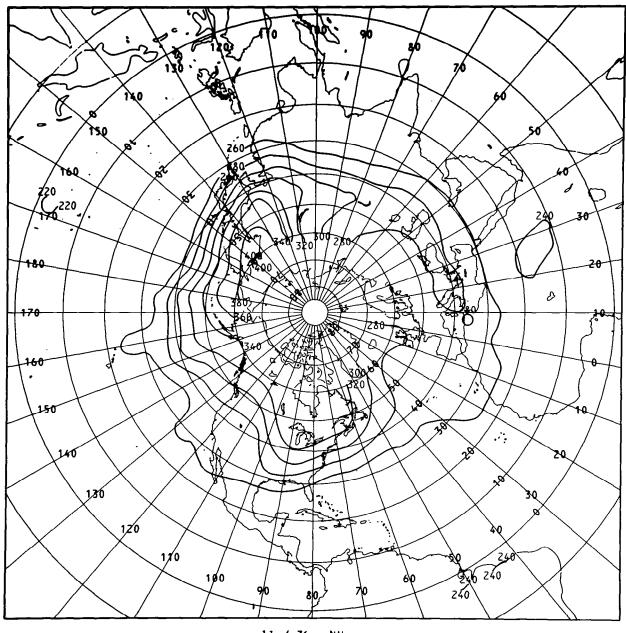
10 / 76 ZONAL LONGITUDE LATITUDE EAST 80 100 120 140 160 180 200 220 240 260 260 300 320 340 MEAN 0 0 0 80 0 252 0 292 266 267 264 280 294 320 0 336 0 325 333 283 0 256 70 0 337 346 294 286 309 291 314 339 291 306 274 264 276 313 274 320 322 342 60 296 0 318 304 258 255 0 296 279 297 285 250 286 305 298 313 293 345 314 50 0 250 248 260 305 254 249 269 275 0 297 282 268 262 274 278 261 277 288 40 258 0 251 263 261 272 0 268 245 272 0 248 247 254 246 0 248 255 30 0 252 251 248 242 0 236 250 236 254 247 253 246 247 254 245 256 243 240 20 0 239 241 230 242 235 245 236 240 0 241 248 0 238 233 226 229 10 0 236 251 252 238 0 231 230 235 235 0 231 0 228 235 0 248 241 G 249

TOTAL OZONE OCTOBER 1976



							1	10 /	76	SH									
LATITUDE					EAS	T				L) N C	G I T	Γυ	ÞΕ					ZONAL
	O	20	40	60	8C	100	120	140	160	186	200	220	240	260	280	300	320	340	MEAN
0	249	0	248	241	0	231	O	228	235	0	231	230	235	235	G	236	251	252	238
-10	C	257	260	0	248	240	235	242	0	239	236	242	239	0	247	248	245	256	245
-20	267	263	O	270	266	276	265	0	266	275	281	257	258	260	2 6 C	()	264	259	264
-30	O	ŭ	ŋ	0	c	0	0	0	G	ð	C	U	0	0	C	o	C	Ü	299
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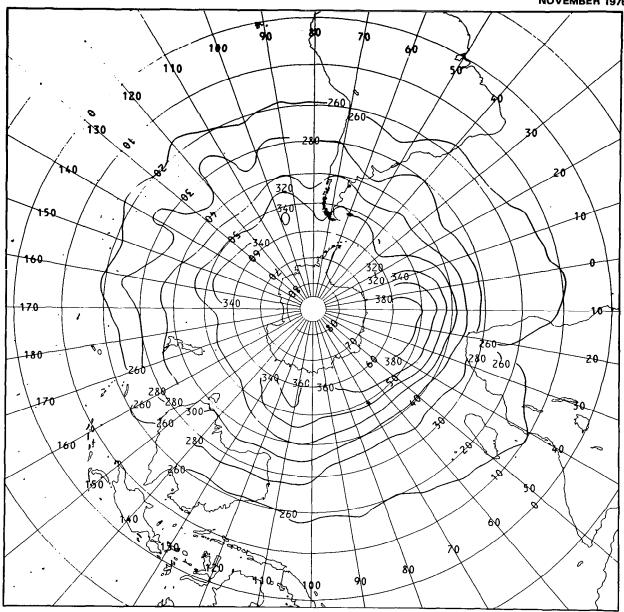
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60	278	243	246	307	271	286	O	40 8	452	391	C	326	334	305	328	312	ø	268	315
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20	241	237	238	0	229	233	252	236	Ú	243	256	240	248	240	232	245	244	251	241
10	240	243	0	235	223	232	227	C	229	228	236	227	230	230	236	0	239	247	232
ð	236	0	239	232	ə	222	222	0	224	0	224	222	219	230	Ú	234	238	241	228



TOTAL OZONE NOVEMBER 1976



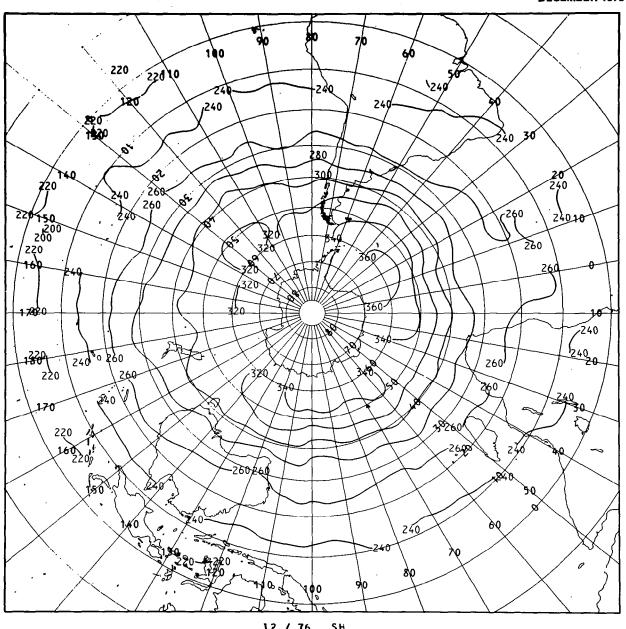
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	0	20	40	60	80	100	1 20	140	160	180	200	220	240	260	280	300	320	340	MEAN
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-10	258	246	259	0	238	235	241	G	J	233	236	245	242	J	237	248	0	250	241
-20	26 2	258	G	266	262	272	255	265	264	256	Û	266	259	250	259	0	268	260	260
-30	269	0	280	267	292	283	o	281	284	272	288	280	276	280	0	275	279	278	277
-40	342	31 3	256	301	302	0	306	29 \$	312	310	305	292	285	a	254	278	294	285	299
-50	378	384	385	346	397	349	329	334	312	C	347	313	323	342	C	307	318	307	337
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80	0	0	э	o	O	0	O	C	G	G	G	G	Ģ	9	C	0	G	0	c
70	0	0	٥	G	Ü	0	٥	0	٥	0	U	C	0	0	0	0	0	Ü	C
60	C	0	0	0	0	0	0	9	٥	0	0	0	0	٥	C	0	C	0	0
50	329	353	313	369	323	317	358	431	404	421	397	359	318	356	353	322	263	338	343
40	G	322	308	309	317	0	370	369	323	350	0	297	272	299	325	326	268	311	319
30	292	288	267	276	247	255	252	258	248	0	266	266	267	271	260	263	256	0	263
20			240				229			235					228				235
10	233	233	Đ	231	220	232	217	C	222	223	0	229	224	226	224	241	228	239	226
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TOTAL OZONE DECEMBER 1976



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	ü	20	40	60	80	100	126	14C	160	180	200	220	240	260	280	300	32 U	340	MEAN	
0	240	0	233	227	0	224	216	212	211	0	216	214	218	220	C	217	228	0	222	
-10	247	240	237	0	234	237	230	224	0	233	226	3	236	228	234	237	Ũ	251	236	
-20	260	251	254	246	249	0	251	256	253	256	253	242	250	255	249	0	240	260	251	
-30	260	Ö	268	269	276	267	258	262	271	0	279	266	276	273	C	271	260	261	268	
-40	O	289	307	314	306	299	283	302	327	286	281	294	312	0	256	300	333	299	296	
-50	348	372	341	372	323	334	330	3C Q	331	312	301	328	C:	324	C	230	352	353	331	
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